

## German balance of payments in 2008

The external economic conditions for the German economy deteriorated severely in the course of 2008. Although, following a good start to the year, exports remained at a very high level until the start of the fourth quarter, they plummeted thereafter. This was the result of the very sharp and globally synchronous economic slowdown, which mainly affected industrial goods, a key market for German exports. The terms of trade also developed unfavourably in the course of the year owing to commodity prices. Overall, the trade surplus contracted noticeably in 2008. The current account surplus fell by a similar margin. This was roughly counterbalanced by corresponding net capital outflows. Capital flows to and from Germany last year were primarily influenced by the escalating financial crisis, which led to a sharp fall in cross-border financial transactions in general and, in some cases, in asset positions, too. As a result, money flowed out of Germany in 2008 on a large scale, mainly in the form of direct investment, but also as lending. By contrast, net capital inflows were recorded in portfolio investment.

### Current account

---

The global setting for German exporters deteriorated severely in the course of 2008. Following a good start, the global economy was

*Changing global economic picture in 2008*

increasingly confronted by dampening effects in the second half of the year. These became paramount in the fourth quarter, when the financial crisis escalated considerably and spilled over to the group of emerging market economies. All of Germany's key sales regions were affected by the global economy's steep slide in the fourth quarter, especially markets in industrialised countries, the new EU member states and the Russian Federation. An additional handicap for German exporters was that demand for capital goods, which traditionally feature prominently in Germany's foreign trade, recently dropped off drastically in line with the customary cyclical pattern after having expanded extremely dynamically in the previous years. Towards the end of the year, the global economic outlook in general, and that for German exporters in particular, was gloomier than it had been for some time. Averaging 3¼% in 2008, worldwide output grew at a noticeably slower rate than in 2007, when it rose by 5¼%. The global trade volume also grew significantly more slowly, with the growth rate falling from 7¼% to 4%. The sales markets for German exporters were disproportionately affected by this; at 2¾%, they grew more slowly than at any time since the global downturn of 2001-02.

In the first three quarters of 2008, global economic momentum was perceptibly dented in addition by the sharp rise in commodity prices and the resulting loss of purchasing power in consumer countries. Although the prices of crude oil and major industrial and agricultural commodities fell sharply again in the second half of the year, they were nonetheless well above those in 2007 on an annual average.

Furthermore, the German economy suffered heavily for a time from the euro's appreciation against major currencies, which persisted until mid-2008. Exchange rate movements consequently led to a significant drop in price competitiveness, especially in markets outside the euro area. On an annual average, however, price competitiveness was still 3¾% above its multi-year average.<sup>1</sup>

Export orders had already reached their cyclical peak in the last quarter of 2007 and first quarter of 2008. Thereafter, they first decreased moderately, then more sharply in late summer 2008. As a result, their annual average level was 7½% below that in 2007. Sentiment among German exporters likewise deteriorated dramatically in the second half of 2008. By the end of the year, expectations regarding the outlook for exports had fallen to their lowest levels since the early 1970s. After German exporters had worked their way through the comparatively large export backlog by the third quarter, exports declined sharply in the fourth quarter, falling 8½% under the first-quarter high in seasonally adjusted terms. On an annual average, nominal exports of goods nonetheless rose by 2¾%, compared with growth of +13½% and +8% in the two previous years. Prices of exported goods increased significantly until late summer – not least because of the hike in energy and commodity prices – before falling perceptibly again in the fourth quarter, partly owing to falling external demand. On average in 2008, export prices increased by 2% on 2007. Real export growth amounted to just

*Sharp fall in export demand in course of year*

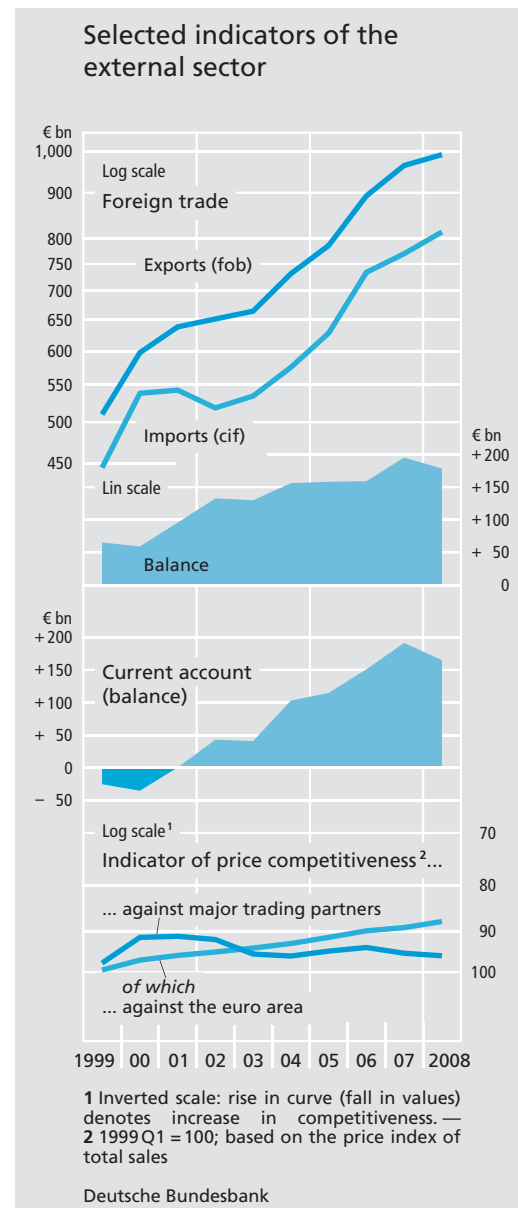
---

<sup>1</sup> Based on the deflators of total sales.

Regional  
breakdown of  
exports

¾% and thus fell well short of the pace of expansion of world trade.

Germany's modest export surplus was supported, above all, by exports to non-euro-area countries, particularly emerging market economies, which, until the summer, had largely managed to avoid being dragged down by the global economic downturn. Exports to countries outside the euro area increased by a nominal 4½% and, in real terms, by 2¾% compared with 2007. As its price competitiveness dropped on an annual average owing to the appreciation of the euro, however, the German economy lost market shares in non-euro-area countries. Germany's export performance outside the euro area also differed across countries. The highest export growth was achieved in the OPEC countries (+19½%) and the Russian Federation (+14¾%), where demand for German goods was fuelled by the further hike in revenue from oil and gas sales until the summer. Exports to China also climbed at the exceptional rate of 14% owing *inter alia* to a substantial increase in demand for machinery and equipment in the wake of capacity bottlenecks. By contrast, exports to the South-East Asian emerging market economies increased at a below-average rate (+1%). The export earnings of German enterprises in the new EU member states rose faster than average (+6¾%), spearheaded by exports to Poland (+11%). The momentum of exports to this region almost halved compared to 2007, however, owing to the sharp economic downturn.



In 2008 German enterprises once again recorded sales losses in the United States. At 2½%, however, the year-on-year fall was much smaller than in 2007. This may have been helped by the fact that German exporters' price competitiveness vis-à-vis domestic US suppliers as well as suppliers from third countries was eroded less than in 2007. This may, in turn, relate to the euro's depreciation against the US dollar which began in summer

**Structure and development of regional foreign trade in 2008**

Country/group of countries	Percentage share	Annual percentage change
<b>Exports</b>		
All countries	100.0	3.1
<i>of which</i>		
Euro-area countries (15)	42.0	1.3
Other EU countries (12)	21.6	1.9
<i>of which</i>		
Nine new member states	11.2	6.8
United States	7.2	-2.5
Russian Federation	3.3	14.8
Japan	1.3	-1.7
Emerging markets in South-East Asia	3.3	1.0
China	3.4	14.0
OPEC countries	2.8	19.6
Developing countries excluding OPEC	8.7	6.3
<b>Imports</b>		
All countries	100.0	6.3
<i>of which</i>		
Euro-area countries (15)	38.9	6.7
Other EU countries (12)	19.5	5.4
<i>of which</i>		
Nine new member states	10.9	5.7
United States	5.6	0.1
Russian Federation	4.4	24.3
Japan	2.8	-5.3
Emerging markets in South-East Asia	4.0	-7.3
China	7.3	5.2
OPEC countries	2.1	31.2
Developing countries excluding OPEC	9.4	-0.1

Deutsche Bundesbank

2008 and the yen's appreciation against the US dollar, which was an extra hurdle for Japanese suppliers wishing to trade in the USA. US demand for German automobiles plummeted, while exports of machinery and chemical products held up relatively well (see box on page 20). German exports to Japan also fell, declining by 1¾% on average in 2008. This was essentially the result of the drop in real domestic demand.

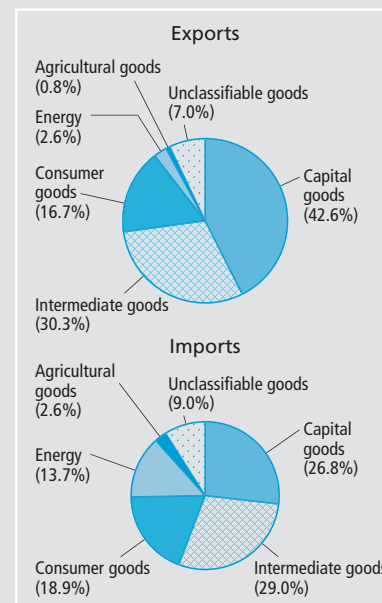
German exports of goods to other euro-area countries also slowed considerably following the onset of the economic slump in these countries from the middle of the year. On an annual average, their value increased by just 1¼% and thus perceptibly less than exports to countries outside the euro area; in real terms, they were actually negative for the first time since 1993. The negative macroeconomic influences were so strong that they clearly outweighed the ongoing improvement of the German economy's price competitiveness vis-à-vis other euro-area countries. Exports to countries that were affected early on by the impact of the financial market crisis – namely Ireland and Spain – fell particularly sharply. By contrast, the German export sector again significantly increased its supplies to France, its most important euro-area sales market (+5¾%). However, deliveries of German cars to France fell, which may be partly attributable to the introduction of an environmental tax with supplements and discounts for promoting the sale of fuel-efficient cars. German manufacturers, most of which belong to the upper market segment, are at a structural disadvantage in this regard.

*Breakdown of  
exported goods*

Broken down by industry, the slowdown in the German export sector reveals a differentiated picture.<sup>2</sup> Producers of capital goods, which account for 42½% of all goods exported from Germany, were most affected for the above-mentioned reasons. Within this category, manufacturers of machinery managed to raise their export revenues by 3½%. Conversely, the automobile industry recorded a 5½% drop in sales abroad. The information and communications technology (ICT) sector likewise registered a sharp fall in goods exports (-9¼%). The decrease was, however, probably slightly smaller in real terms as prices of these goods fell again.

Exporters of intermediate goods also fell prey to the global economic downturn. The value of exported intermediate goods, which account for almost one-third of German exports, was ½% lower in 2008 than a year earlier. German producers only managed to partly pass on the considerable price hikes affecting industrial raw materials and crude oil, which play a significant role in the manufacture of intermediate goods, to their customers at home and abroad. Looking through the range of intermediate goods, nominal exports of chemical products rose sharply; however, three-quarters of this increase was price-related. In this case, the rise in export prices was driven mainly by higher energy prices. By contrast, export revenue generated from the sale of metals and metal products fell by 1¼% – and even more in real terms. The value of exported consumer goods, on the other hand, continued to grow at a relatively fast pace (4½%).

**Foreign trade by selected categories of goods in 2008**



Deutsche Bundesbank

The nominal value of imported goods rose by 5¾% in 2008 and thus considerably more steeply than exports. In real terms, however, they went up by only ½%. Import growth was dampened, in particular, by the weaker momentum of exports, the production of which entails a large share of imported inputs. The sharp rise in the price of imports (+5¼%) was attributable chiefly to the hike in the prices of oil and natural gas as well as food, beverages and tobacco up to mid-2008. Since then, world market prices for these goods have, however, fallen considerably in the wake of the global economic downturn. On an annual average, the price

*Imports*

<sup>2</sup> The breakdowns of exports and imports are distorted by the large share of goods which so far are not classifiable by product group. Consequently, the rates of change for the individual categories of goods and main groupings cannot be aggregated to form an overall rate.

## Marked regional differences in the foreign business of major export industries

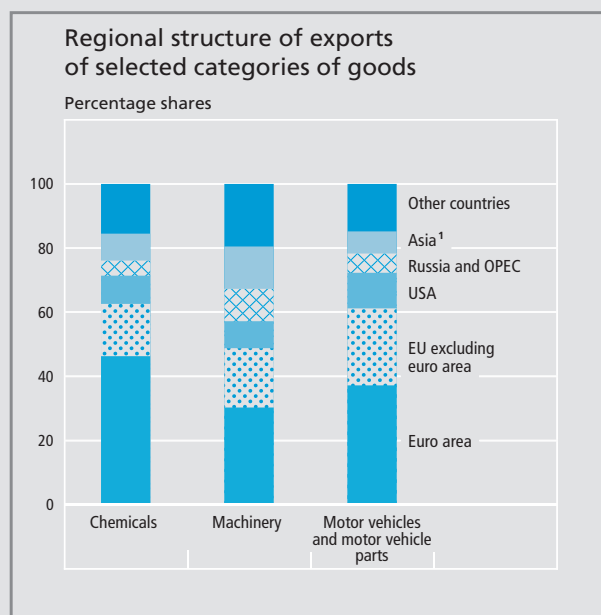
The automotive industry was Germany's leading export sector in 2008, accounting for a share of 17½%, followed by machinery (14¾%) and the chemical industry (14%). In the following, export developments in these three sectors of industry will be examined in more detail, differentiated by country of destination and sales region.

Euro-area trading partners were by far the most important customers of German exporters in each of these industries. However, the machinery sector recorded a far lower export ratio to euro-area countries (30¼%) than did motor vehicles and motor vehicle parts (37¼%) and chemicals (46¼%). EU member states outside the euro area were the second most important export destination. These countries represented a considerably higher percentage of Germany's motor vehicle exports, namely 24%, than of machinery (18½%) and chemicals (16¼%). In terms of machinery deliveries, customers in Asia (defined here as the South-East Asian emerging market economies including Japan and China) have, in recent years, moved up to third place with an export share of 13¼%, followed by the oil and gas-exporting nations (Russia and OPEC) with 10% and the United States with 8½%. In terms of exports of chemicals and motor vehicles, the United States (export share 8¾% and 11¼% respectively) remained ahead of both Asia (8½% and 7% respectively) and of Russia and the OPEC countries (together 4¾% and 6% respectively).

Overall, the value of exported chemicals expanded by a fairly strong +6½% in 2008 in a year-on-year comparison. German manufacturers of machinery were also able to perceptibly raise their foreign sales as the orders situation was initially still comparatively good (+3½%). By contrast, export revenues in the automotive industry fell sharply (-5½%). It is striking that, in terms of exports to the EU and the USA, of the three categories of goods only chemicals registered gains, while exports of machinery were already slightly lower and motor vehicle exports fell sharply, especially in the second half of the year.

Differences between the various categories of goods were most pronounced for exports to the United States, with chemicals up (+22¾%), machinery down slightly (-2¼%) and motor vehicles sharply lower (-13½%). The relatively large volume of automobile exports to the United States meant that this one country accounted for just under a third of all the German car industry's export shortfall. Following a moderate decline in the first half of the year, deliveries plummeted by around 25% in the second half. However, the drop in sales to the United States hit not only German manufacturers – domestic brands were even worse affected. Overall, unit sales of light vehicles (passenger cars and vans) fell by 18% last year. In this sharply contracting market, German manufacturers were able to limit their sales losses to 6%. Their market share consequently actually rose slightly, by 1 percentage point to just above 6½%, while their share of the passenger car business in 2008 amounted to as much as 10½%. There are various reasons for the collapse of the US auto market. On the one hand, the hefty increase in fuel prices in the first half of the year noticeably dented consumers' propensity to purchase, particularly cars with a high fuel consumption. On the other hand, sales were also curbed by the recessionary development which set in at the end of 2007 and the increasingly tight credit standards which resulted from the financial crisis. Even before that, US automobile manufacturers had resorted to rebates in an attempt to stabilise sales. German car exporters additionally had to contend with the euro's appreciation up until the third quarter of 2008. One of the main reasons for the strong growth in the German chemical industry's US business was the marked increase in exports of basic pharmaceutical products. Like final pharmaceutical products, these are far less subject to cyclical factors than other chemical products and accounted for 47½% of total chemical exports to the United States at the last count.

At 6%, growth in the German chemical industry's exports to non-euro-area EU countries clearly outpaced exports to the euro area, which rose by 2¾%. In both sales regions, growth



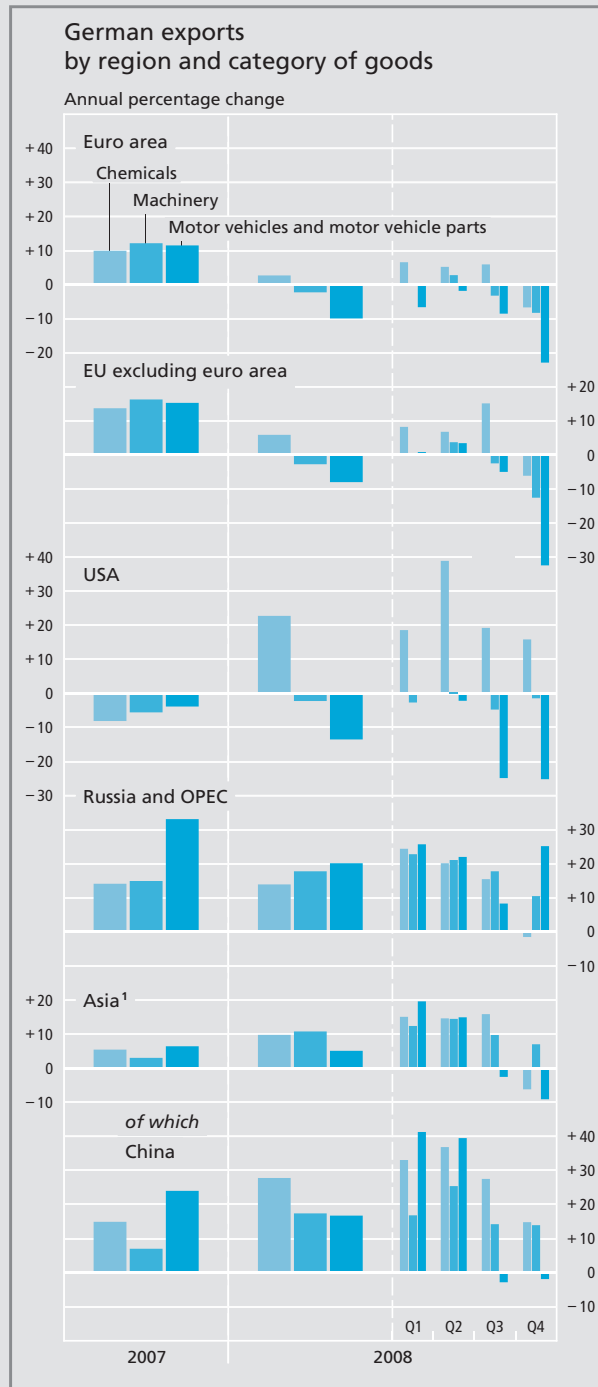
1 South-East Asian emerging market economies including China and Japan.

Deutsche Bundesbank

was in turn supported by pharmaceutical products. Exports of these products to the euro area expanded much less than those to other EU member states. However, as pharmaceutical products' share of chemicals exports (17¾%) is roughly four times larger for exports to the euro area than to the other EU countries, the euro-area member states nevertheless made twice as large a contribution to the industry's export performance. In addition, the chemical industry's export revenues were buoyed by higher fertiliser sales. Moreover, considerably more pesticides were exported to the other EU countries than a year earlier.

By contrast, German exports of motor vehicles to the euro area and the other EU countries fell sharply, by 10% and 8% respectively. In the euro-area countries, demand for automobiles weakened perceptibly as early as the first half of the year, while the other EU countries were not hit by the industry's cyclical downturn until the third quarter. However, in this sales region, exports of motor vehicles fell even more sharply in the final quarter of the year, down 32½%, than did deliveries to the euro area (-23%). This can largely be explained by the fact that the UK car market, which had absorbed 11% of German automotive exports in 2007, shrank by 11¼% – as measured by registrations – as the considerable economic slowdown and growing financing constraints started to bite. This alone lowered German exports of motor vehicles and motor vehicle parts by 1½%.

Exports to Russia and the OPEC countries as well as the Asian region fared much better than the three sectors' sales to the industrialised countries. Here, average growth rates for the year were largely still in double digits. In these regions, exports of machinery expanded so strongly that the, on an annual average, comparatively moderate drop in demand on the European sales markets and in the USA was more than offset. Exports of machinery to China, which rose by a total of 17½%, were a major contributory factor in this. In addition, business with Russia (+20½%) and the OPEC countries (+14½%) expanded sharply. In these sales regions, demand was particularly strong for, *inter alia*, internal combustion engines and turbines, pumps and compressors, printing machinery and machine tools, machinery for mining and construction as well as lifting and handling equipment. Again, the German automotive industry put in a strong performance in these economies (OPEC countries +25½%, China +16¾%, Russia +16%), although the dynamic momentum of 2007 was not maintained. However, these countries' share of total exports was too low to compensate for the slump in demand in the major European countries and the United States.





of Brent crude oil denominated in euro nonetheless rose by 25% and other commodities by 4½%. The import prices of goods with less production depth (raw materials and semi-finished goods) therefore soared in 2008, while the price of imported finished goods remained unchanged. Overall, Germany's terms of trade deteriorated by 2¾% in the period under review. This decline, which was largely caused by energy prices, caused significant real income losses for German consumers but triggered barely any substitution effects as demand for imported energy is very inelastic to price changes in the short term.

*Breakdown of imported goods*

In terms of value, imports of energy expanded particularly rapidly (+36%) in 2008. Three-quarters of this increase was, however, price-related. The associated loss of purchasing power in Germany amounted to €16¼ billion or 0.7% of nominal GDP compared with 0.1% in 2007. Conversely, the value of imported intermediate goods fell significantly in 2008 (-3%). This was due to the fact that imports of metal and metal products fell 4¼% short of their 2007 level in nominal terms; price reductions accounted for two-fifths of this drop. Foreign manufacturers of chemical products sold 2% more of their goods in Germany; on a price-adjusted basis, however, their sales decreased.

The value of imported capital goods fell by 4½%. This overstates the decline in investment activity in Germany, however, as foreign manufacturers of motor vehicles and motor vehicle parts, above all, recorded a sharp fall in sales in Germany (-6¼%) and demand

for imported vehicles stems mainly from households. Import revenue from goods in the information and communications technology sector declined on a similar scale. Owing to the continued sharp fall in the price of these goods – in the case of office machinery and computers, prices declined by no less than 24% – there was, nonetheless, a significant increase in imports in real terms. The value of imported machinery increased only a little and remained more or less unchanged on a price-adjusted basis. Overall, therefore, imports in the traditional machinery and equipment sector recorded a rise in volume in 2008 that is consistent with the buoyant investment activity in trade and industry in Germany.

The aggregate value of imports from the euro area rose by a nominal 6¾% or 2¾% in real terms, whereby the pattern of goods imports from individual euro-area countries varied greatly. While imports from France increased by 6%, supplies imported from Italy rose merely by 2¾%. Imports from countries outside the euro area rose by 6% in 2008. On a price-adjusted basis, however, they increased only marginally. One explanation for this is the steep increase in the price of energy and commodities, which come chiefly from non-euro-area countries. Thus growth in nominal imports from major oil and gas-producing countries, such as the OPEC countries (+31¼%) and the Russian Federation (+24¼%), was therefore particularly high. Imports from China also rose by a comparatively large margin (+5¼%). By contrast, the declining trend in imports from the South-East Asian emerging market countries con-

*Regional breakdown of imports*



tinued (-7¼%). Following on from the positive result in 2007, revenue generated from exports by the new EU member states in central and eastern Europe increased by 6¼%. Furthermore, US exporters managed to stabilise their sales on the German market following the slump of the previous year. The marked reduction in imports from Japan (-5¼%) is attributable to both the yen's appreciation against the euro in the second half of the year, which led to a perceptible increase in the price of Japanese goods, and the cooling of demand for motor vehicles in Germany.

*Trade and  
current account  
balances*

In 2008, a trade surplus of €178½ billion was generated on balance. The surplus was €16¾ billion down on the record year 2007. This was due mainly to the worsening of the terms of trade in conjunction with commodity prices as well as the slump in exports in the fourth quarter of 2008 together with persistently robust import activity. The deficit on "invisible" current transactions amounted to €1¼ billion. Overall, the current account surplus, which includes supplementary trade items, narrowed to €165 billion or 6½% of nominal GDP. A similar development was evident in other traditional surplus-producing countries such as Japan in 2008, while countries with chronic deficits, notably the USA, reduced their current account gaps noticeably.

*Invisibles*

There was a reversal on the invisibles account, which comprises services, income and current transfers, from a surplus of €5¾ billion to a negative balance of €1¼ billion. The lower deficit in the services sub-account was offset

**Major items of the balance  
of payments**

€ billion

Item	2006	2007	2008
<b>I Current account</b>			
<b>1 Foreign trade <sup>1</sup></b>			
Exports (fob)	893.0	965.2	992.5
Imports (cif)	734.0	769.9	814.0
Balance	+ 159.0	+ 195.3	+ 178.5
Supplementary trade items <sup>2</sup>	- 13.1	- 9.8	- 12.5
<b>2 Services (balance)</b>	- 14.0	- 13.3	- 12.8
of which			
Foreign travel (balance)	- 32.8	- 34.3	- 34.8
<b>3 Income (balance)</b>	+ 46.1	+ 50.6	+ 44.7
of which			
Investment income (balance)	+ 46.8	+ 50.2	+ 44.1
<b>4 Current transfers (balance)</b>	- 27.1	- 31.6	- 33.1
Balance on current account	+ 150.9	+ 191.3	+ 164.9
<b>II Balance of capital transfers <sup>3</sup></b>	- 0.3	+ 0.1	- 0.1
<b>III Financial account <sup>4</sup></b>			
1 Direct investment	- 55.9	- 90.0	- 89.8
2 Portfolio investment	- 12.3	+ 152.4	+ 43.9
3 Financial derivatives	- 6.2	- 85.9	- 25.6
4 Other investment <sup>5</sup>	- 103.6	- 212.8	- 129.9
5 Change in the reserve assets at transaction values (increase: -) <sup>6</sup>	+ 2.9	- 1.0	- 2.0
Balance on financial account	- 175.0	- 237.3	- 203.4
<b>IV Errors and omissions</b>	+ 24.3	+ 45.9	+ 38.6

<sup>1</sup> Special trade according to the official foreign trade statistics (source: Federal Statistical Office). From January 2007, excluding supplies of goods for or after repair/maintenance, which up to December 2006 were deducted via supplementary trade items. — <sup>2</sup> Including warehouse transactions for the account of residents and the deduction of goods returned. — <sup>3</sup> Including the acquisition/disposal of non-produced non-financial assets. — <sup>4</sup> Net capital exports: -. For details see the table "Financial transactions" on page 26. — <sup>5</sup> Includes financial and trade credits, bank deposits and other assets. — <sup>6</sup> Excluding allocation of SDRs and excluding changes due to value adjustments.

Deutsche Bundesbank

by lower net income and a higher deficit on current transfers.

*Services*

The net deficit on services transactions shrank by €½ billion to €12¾ billion in 2008 owing to improvements in several segments. Transportation and financial services both made a marked contribution, with the surpluses increasing by €1 billion in each case to €7¾ billion and €4 billion, respectively. In the area of other services, which encompasses a variety of different positions, the positive balance amounted to €1 billion, following a slight deficit in 2007. Increased net earnings from engineering and other technical services as well as research and development played a key role in this regard. Conversely, the net surplus resulting from insurance services fell by €1¾ billion to €¼ billion. This was due to the fact that, in the case of German reinsurers, the ratio of receipts from premiums to their payments of claims to non-residents declined significantly, whereas the business operations of foreign reinsurers in Germany improved slightly.

*Travel*

By contrast, the deficit run up in the field of foreign travel, which is by far the biggest item in cross-border services, rose by €½ billion to €34¾ billion in 2008. Although receipts rose much faster (+3½%) than expenditure (+2¼%), the former are only half as high as the latter in terms of amount. Expenditure associated with trips to other euro-area countries, which account for almost half of this entire position, rose perceptibly, whereas only slightly more was spent on journeys to non-euro-area countries. In terms of individual countries, the picture was very

mixed. Of the main European holiday destinations, Italy and Turkey evidently proved perceptibly more attractive to German holiday-makers, while the popularity of France and Spain increased only moderately. Travel to the USA and Asia, which posted the highest spending growth last year, was probably boosted by the depreciation of the US dollar against the euro, which persisted well into the third quarter.

*Income*

The surplus in cross-border income declined by €6 billion to €44¾ billion in 2008 despite an improvement in the German economy's net external position. This was primarily because of the decrease in the positive outturn of investment income as expenditure on investment income grew faster (+€12¼ billion) than the corresponding receipts (+€6½ billion). The rise in resident investors' income from abroad was chiefly attributable to increased revenue from bonds and notes and money market instruments as well as loans to non-residents, which related *inter alia* to cross-border interbank transactions. Owing to falling short-term interest rates, however, these did not grow as robustly as in 2007. By contrast, earnings from direct investment went down as a result *inter alia* of the poorer profitability of foreign subsidiaries.

On the debit side, interest paid to non-residents on bonds and notes and money market instruments rose at a slightly higher rate than in 2007. Moreover, dividend payments to non-resident investors increased considerably in the wake of resident enterprises' relatively buoyant earnings in 2007, when the related profits were largely gener-

ated. Interest payments on bank loans taken up outside Germany also rose. Conversely, non-resident investors' income from direct investment fell. Overall – applying due caution owing to the preliminary nature of the figures – it is likely that the average return on Germany's external assets in 2008 fell well short of the effective rate of return on assets invested in Germany.

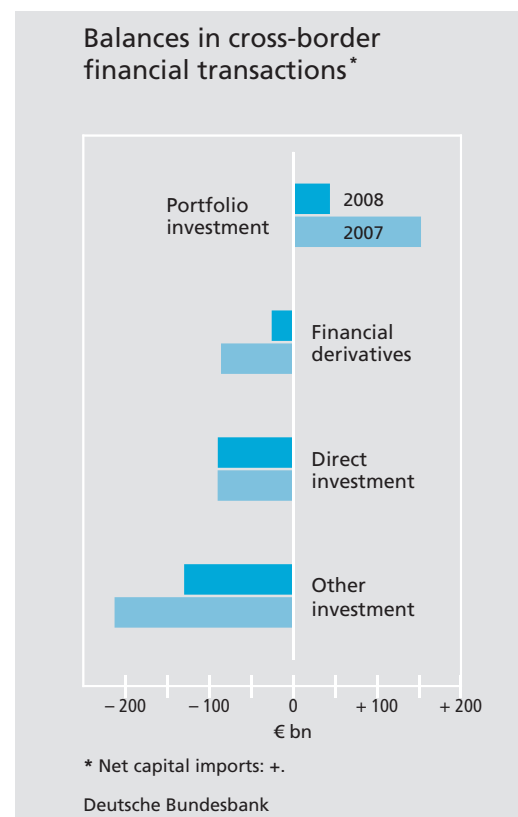
*Transfers*

The net deficit arising from current transfers rose by €1½ billion to €33 billion in 2008. This was mainly because of the increase in net private transfers paid. Furthermore, the deficit from public transfers also went up by €½ billion on the back of increased net transfers to the EU budget. This was influenced by higher German payments to the EU on the basis of the national product-related financing regime as well as excise duties and other levies. These more than offset the lower German VAT contribution to the EU budget and increased EU payments to Germany in connection with the Common Agricultural Policy.

**Financial transactions**

*Determinants*

The current account surplus is reflected within the balance of payments in Germany's high net capital outflows (€203½ billion). The development of cross-border financial transactions in 2008 was dominated, however, by the escalation of the crisis in the financial sector in the course of the year. In particular, the insolvency of the US investment bank Lehman Brothers in September led to a severe loss of confidence in the international financial markets, which was reflected in a dramat-



ic decline in the price of risky assets and necessitated government assistance in many countries. Furthermore, major central banks lowered their key interest rates significantly in several stages. The bond markets were principal beneficiaries of this. Longer-dated government bond yields in Germany and the USA fell significantly, whereby the yield spread widened palpably in favour of domestic instruments. In the foreign exchange markets, the high degree of uncertainty led to substantial exchange rate fluctuations. As a result of the turbulence, market participants became increasingly more cautious in the course of the year and liquidated cross-border positions on a sizeable scale towards the end of 2008.

## Financial transactions

€ billion, net capital exports: –

Item	2006	2007	2008
Direct investment	– 55.9	– 90.0	– 89.8
German investment abroad	– 101.4	– 131.2	– 106.8
Foreign investment in Germany	+ 45.6	+ 41.2	+ 17.0
Portfolio investment	– 12.3	+ 152.4	+ 43.9
German investment abroad	– 158.3	– 145.5	+ 27.9
Equities	+ 6.5	+ 23.1	+ 39.2
Mutual fund shares	– 23.6	– 41.6	– 8.6
Bonds and notes <sup>1</sup>	– 133.7	– 105.3	– 20.2
Money market instruments	– 7.4	– 21.7	+ 17.5
Foreign investment in Germany	+ 146.0	+ 297.9	+ 16.0
Equities	+ 19.8	+ 39.2	– 49.3
Mutual fund shares	+ 8.1	+ 3.9	– 5.8
Bonds and notes <sup>1</sup>	+ 120.9	+ 203.3	+ 23.3
Money market instruments	– 2.8	+ 51.5	+ 47.8
Financial derivatives <sup>2</sup>	– 6.2	– 85.9	– 25.6
Other investment <sup>3</sup>	– 103.6	– 212.8	– 129.9
Monetary financial institutions <sup>4</sup>	– 148.4	– 151.7	– 132.4
Long-term	– 84.7	– 111.0	– 132.7
Short-term	– 63.6	– 40.6	+ 0.3
Enterprises and households	+ 20.7	– 12.2	+ 23.8
Long-term	+ 5.9	– 28.5	+ 4.6
Short-term	+ 14.8	+ 16.3	+ 19.1
General government	+ 0.9	+ 5.4	+ 9.0
Long-term	+ 8.3	– 2.5	– 1.5
Short-term	– 7.5	+ 7.8	+ 10.5
Bundesbank	+ 23.2	– 54.4	– 30.2
Change in the reserve assets at transaction values (increase: –) <sup>5</sup>	+ 2.9	– 1.0	– 2.0
Balance on financial account	– 175.0	– 237.3	– 203.4

<sup>1</sup> Original maturity of more than one year. — <sup>2</sup> Securitised and non-securitised options and financial futures contracts. — <sup>3</sup> Includes financial and trade credits, bank deposits and other assets. — <sup>4</sup> Excluding Bundesbank. — <sup>5</sup> Excluding allocation of SDRs and excluding changes due to value adjustments.

Deutsche Bundesbank

The escalation of the crisis is clearly visible in the securities markets, where changes in investors' risk-return perceptions, as past experience shows, are quickly reflected in transaction volumes. Cross-border portfolio turnovers may serve as a gauge of the tensions in the financial system. Thus, whereas the value of securities bought and sold in the German balance of payments increased at an average annual rate of almost 11% from 1999 to 2007, the transaction volume plummeted by almost 30% between the first and the fourth quarter of 2008. This slump was much more severe than that experienced after the price bubble for technology stocks burst in 2000, when cross-border securities sales fell by more than 17% over a comparable period. This steep slide in turnover partly mirrors the dramatic drop in the price of many investment instruments. Above all, however, it shows that some securities segments became illiquid in the course of the crisis owing to a lack of demand and that trading in some financial products came to a virtual standstill.

2008 saw external portfolio investment close with net capital inflows of €44 billion; this was well down on the record inflows of 2007 (€152½ billion). However, this rather low net amount masks considerable crisis-related activity in the gross flows, by means of which resident and non-resident investors reacted to the unfolding events in the reporting period. Thus a sharp reversal occurred in the investment behaviour of German investors. Whereas they had increased their holdings of foreign securities by €145½ billion in 2007, they sold foreign instruments worth a net €28 billion in 2008. These sales began in the third

*Portfolio investment transactions down*

*Net capital imports in portfolio investment*

quarter and intensified towards the end of the year. Between October and December alone, German investors disposed of foreign securities in the amount of €74½ billion. The main sellers were financial institutions.

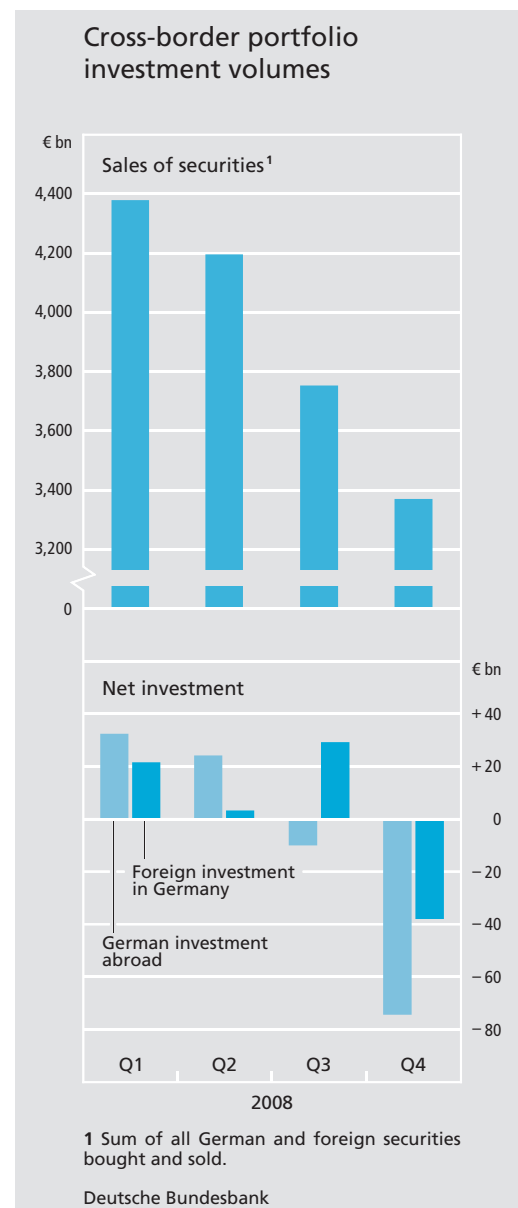
*German investment in foreign ...*

This investment pattern, with different profiles in the two halves of the year, is reflected clearly in the purchase of foreign bonds and notes. In the first two quarters, bonds worth €51 billion were bought and thereafter debt securities to the value of €30½ billion were sold. The sales were primarily of euro-denominated longer-term debt securities (July to December 2008: €23 billion), which are usually the most popular foreign financial instrument by far among German investors. As the crisis intensified and investors' own funding requirements grew, they evidently focused increasingly on price and liquidity risks. Bank debt securities issued by foreign borrowers were most affected by the market withdrawal; however, government bonds from euro-area partner countries were also sold on balance. The interest rate spread on euro-area government bonds over German Federal bonds (Bunds), which as a safe and liquid instrument constitute the benchmark, increased by 80 to 95 basis points over the year.

*... debt securities, ...*

*... foreign currency bonds, ...*

German investors were also very wary of purchasing bonds and notes denominated in foreign currencies in 2008, after topping up their portfolios with large quantities of such debt securities – mostly denominated in US dollars – in previous years. On balance, they purchased foreign currency bonds worth €8½ billion (when converted to euro) from foreign



issuers in 2008, compared with €30½ billion in 2007. The overall result is skewed, however, by a single large transaction in which a financial institution acquired asset-backed securities from one of its own special-purpose vehicles abroad. Without this transaction, a net sell-off would have been recorded. Besides a general reluctance to engage in complex securitisations, this was probably due to the euro-dollar interest rate differential,

which tilted in favour of the euro at the end of 2007 and for a time widened noticeably in 2008. The high exchange rate volatility may likewise have prompted investors to take a more cautious approach to their cross-border transactions.

*... money  
market  
instruments, ...*

In addition to bonds and notes, foreign money market instruments – which were used as a financing instrument by special-purpose vehicles, among others, prior to the crisis – were also affected by the reorientation of German investors in the latter part of the third quarter. Redemptions and sales predominated within this segment of portfolio investment on balance towards the end of the year, with the result that net repatriation of funds in the amount of €17½ billion was recorded in 2008. German capital market participants mainly offloaded short-dated bonds denominated in US dollars and structured money market products.

*... equity...*

German investors also further reduced their net holdings of foreign shares (€39 billion). Caught in the crossfire of growing concern about the overall state of the financial sector and the ever gloomier real economic outlook, the prices of equities plummeted across a broad front over the course of the year (-39% according to the MSCI World Index). Initial public offerings, and thus supply-side purchase stimuli, were likewise rare in this environment. As a result, resident investors – primarily from the financial sector whose own liquidity needs had increased – withdrew from the stock markets, especially of EU partner countries (€24 billion) and the USA (€13½ billion).

Indirect holdings of securities mediated via foreign investment companies fell steeply in 2008. Although German residents invested €8½ billion net in foreign mutual funds, this was much lower than the amounts invested in the previous two years (€41½ billion and €23½ billion). The cause of this decrease was that savers sold foreign mutual fund products from mid-September, when the financial crisis escalated. In the fourth quarter alone, outflows of funds amounted to €13½ billion. Since the withdrawals mainly affected money market funds and bond-based funds remunerated at money market rates, the decision to sell may have been influenced by the fact that, since the beginning of October, investors have favoured government-guaranteed deposits at banks in Germany as opposed to fund-based foreign products remunerated at money market rates. Furthermore, public discussion regarding the possible raising of the tax on tax-optimised money market funds may have encouraged savers to reduce their holdings of these products.

*... and mutual  
fund shares*

Non-residents' demand for portfolio investment in Germany also fell distinctly in the course of 2008. On balance, foreign investors bought German securities totalling just €16 billion last year. In 2007, they invested a record value of €298 billion in the German market.

*Foreign  
investment in  
domestic ...*

This drastic decrease in inflows of funds was caused by lower foreign demand for German bonds and notes (€23½ billion compared with €203½ billion in 2007). In the area of private long-term bonds, sales and redemptions predominated on balance (-€7 billion

*... private debt  
securities, ...*

compared with net purchases of €140 billion in 2007). This was due partly to the sharp decline in net cross-border sales of “certificates” and warrants, which some suppliers regularly transfer *en bloc* to affiliated enterprises abroad.<sup>3</sup> Moreover, the market turbulence also led to a strong impetus to sell German issuers’ traditional bank debt securities, which were previously a primary focus of foreign investors. As a result, the interest rate spread between public and private debt securities with a maturity of ten years surged to an unprecedented level of 110 basis points towards the end of the year.

... public debt securities, ...

The severe tensions in the markets for long-term securitised investments benefited secure and liquid German government bonds. This can be seen first and foremost in their above-mentioned interest rate discount compared with government bonds of other European countries and *vis-à-vis* private issues. In terms of volume, however, non-resident buyers purchased far fewer Bunds in 2008 than in 2007 (€30½ billion net compared with €63½ billion net). On the one hand, this decrease relates to supply factors as net sales of government bonds, at €25½ billion, were at their lowest level since 2001 thanks to German central government’s successful fiscal consolidation efforts in the past. On the other hand, these figures also clearly show how badly some market participants needed liquidity in this difficult market situation. Thus in the fourth quarter of 2008, when other markets dried up, non-residents disposed of liquid German government bonds worth €7½ billion net, thus freeing up some much needed cash.

By contrast, German money market instruments found favour with non-resident buyers all year. Overall, demand from non-residents in 2008 was comparable with 2007 (€48 billion net compared with €51½ billion net). Over half of the amount invested was accounted for by short-term “certificates” and warrants launched by private issuers which, as mentioned above, were transferred to foreign enterprises within the group until sold on to private investors.

... money market instruments, ...

After a five-year boom – measured against the broad CDAX index – German share prices plummeted by 44½% last year amid massive fluctuations. Owing to the unfavourable economic outlook and declining prices, foreign investors divested from German shares in the amount of €49½ billion, which represented a huge reversal from the high net capital inflows seen in the preceding years. Almost one-fifth of these shares related to domestic financial institutions (€9 billion). Another factor was that a German enterprise, when it took over a domestic DAX group, acquired stocks which had previously been held by non-resident investors to a large extent.

... equity...

Owing to the crisis, investment in the German mutual fund sector was very restrained in 2008. This was also reflected in the external sales figures for German mutual fund shares. Outflows of funds in this segment amounted to €6 billion net in 2008. This was the highest

... and mutual fund shares

---

<sup>3</sup> The drop in sales of certificates was accompanied by lower net capital exports in the area of financial derivatives (€25½ billion compared with €86 billion in 2007), which are often used to hedge such positions. For more details, see Deutsche Bundesbank, The German balance of payments in 2007, Monthly Report, March 2008, pp 26-27.



level of net outflows to other countries ever recorded in one year in this sector. Non-resident investors mainly sold off interest-bearing units in funds open to the general public. Only specialised funds managed to attract investors on balance.

*Global direct investment*

The effects of the financial crisis were also reflected in cross-border direct investment, although this, owing to its largely medium to long-term nature, usually reacts considerably more slowly to changes in financial market conditions than portfolio investment. According to initial UNCTAD estimates, global direct investment flows thus declined by around one-fifth to US\$1.4 trillion (€950 billion) in 2008, after increasing by 30% in 2007. Mergers and takeovers even showed slightly stronger declines. This was because of the very tight curbs on external and internal financing capabilities as well as the gloomier economic outlook.

*German net capital exports in direct investment*

The unfavourable global conditions also affected direct investment with German involvement. German incoming and outgoing direct investment decreased by roughly the same amount. All in all, net capital exports in this segment thus remained largely unchanged at €90 billion in 2008.

*German direct investment abroad*

At €107 billion, the volume of resources invested abroad by German enterprises in 2008 was lower than in 2007 (€131 billion). The main investment focus was on foreign affiliates, which received significantly more equity capital. Investors from the manufacturing, energy and transport and communication sectors used the available opportunities to

consolidate their presence abroad through takeovers. Furthermore, domestic owners re-invested a large proportion of the overall high profits generated by their foreign branches and subsidiaries in 2008 in their direct investment enterprises. They also furnished them with funding within the context of inter-group loans. This was done predominantly by granting financial credits, almost two-thirds of which were of a short-term nature. Over three-quarters of total German direct investment flowed into European countries in 2008. The Netherlands (€18 billion), which accounted for a large share in connection with a group restructuring project, Spain (€15½ billion), the United Kingdom (€8½ billion) and Sweden (€8 billion) proved to be particularly sought-after investment destinations. Outside Europe, German enterprises additionally invested €12½ billion in the USA.

Compared with 2007, the unfavourable global economic conditions had a much greater impact on foreign direct investment in Germany than on German enterprises. Foreign direct investment in Germany amounted to €17 billion in 2008, down almost 60% on 2007 (€41 billion). Foreign proprietors allocated, above all, less equity capital to their branches domiciled in Germany. This was due not least to the sharply contracted activities of private equity enterprises.<sup>4</sup> The regional origin of direct foreign investment in Germany was heavily influenced by the restructuring of one group. This resulted in capital inflows of

*Foreign direct investment in Germany*

---

<sup>4</sup> According to Thomson ONE Banker data, credit-financed purchases of German enterprises by foreign private equity enterprises (LBO transactions) fell from €16½ billion in 2007 to €2½ billion in the reporting period.

€16½ billion from Luxembourg and outflows of €9 billion and €3½ billion to the United Kingdom and the Netherlands.

*Other investment ...*

Like direct investment, other investment, which comprises financial and trade credits (where not allocated to direct investment) as well as bank deposits and other assets, recorded net capital exports in 2008. These amounted to €130 billion compared with outflows of €213 billion one year earlier.

*... of non-banks ...*

Contrary to overall developments, non-banks recorded net inflows of €33 billion in unsecured financial transactions. Almost three-quarters of this amount related to transactions by enterprises and households (€24 billion). These chiefly raised long-term loans abroad on balance. Further inflows of funds of €9 billion were allocated to operations of general government, which raised short-term loans abroad.

*... and the banking system*

The net capital outflows in the area of unsecured financial transactions were therefore attributable to cross-border transactions in the banking system. The majority of these related to credit institutions' increase in net external assets (€132½ billion). They issued a considerable volume of long-term financial credit to foreign counterparties. Much of this involved granting credit to branches and subsidiaries abroad and supporting the banks' own special-purpose vehicles domiciled outside Germany, which had come under pressure owing to the financial crisis. The extent to which the tense situation on the money markets affected banks' unsecured external transactions is reflected in the drastic reduc-

tion in their short-term cross-border credit claims and liabilities.<sup>5</sup> Since both claims and liabilities dropped by more or less the same amount in this segment, the net balance of payment flows showed little fluctuation, however. By contrast, a transaction-related €30 billion increase in the Bundesbank's net external asset position had a more substantial impact. The increase in claims within the TARGET2 large-value payment system played a crucial role in this regard (€44½ billion). This was partially offset by higher external liabilities, including central bank deposits at the Bundesbank.

The Bundesbank's reserve assets, transaction-related changes in which are shown in a separate item in the balance of payments, increased by €2 billion in 2008. This was attributable to the increase in foreign currency reserves as well as the increase in the Bundesbank's reserve position in the IMF (including special drawing rights), following *inter alia* a euro draw by the fund.

Apart from the current transactions recorded in the balance of payments, the reserve assets gained €4½ billion in value through the usual revaluation at market prices. This was because of the upward valuation to €68 billion of the Bundesbank's gold holdings, which resulted from the increase in the price of gold denominated in US dollars and the simultaneous appreciation of the US dollar against the euro. All in all, the reserve assets rose by €6½ billion in balance sheet terms. At the end of 2008, they stood at €99 billion.

*Bundesbank's reserve assets: transactions ...*

*... and revaluation*

<sup>5</sup> German banks' portfolio of claims also fell owing to write-downs, which are, however, not recorded in the balance of payments.