Financial markets

Financial market trends

Financial market setting

The international financial market crisis escalated further in the fourth quarter of 2008 and increasingly spilled over to the real economy. Conversely, the gloomier economic outlook hurt sentiment in the financial markets. On balance, equities recorded massive losses, since investors withdrew funds from risky investments and moved them into secure and liquid paper. Besides US Treasuries, Federal bonds were the main beneficiaries. Their yield spread vis-à-vis the corresponding debt securities issued by other euro-area countries increased significantly. Given more pessimistic assessments of default risk and the clearly heightened risk aversion, the interest rate premiums of European corporate bonds also temporarily marked new record highs. In the international foreign exchange markets, the euro recorded clear gains in December 2008. However, it relinquished a large part of these gains in the first few weeks of the new year.

Exchange rates

Euro exchange rate development against the US dollar, ...

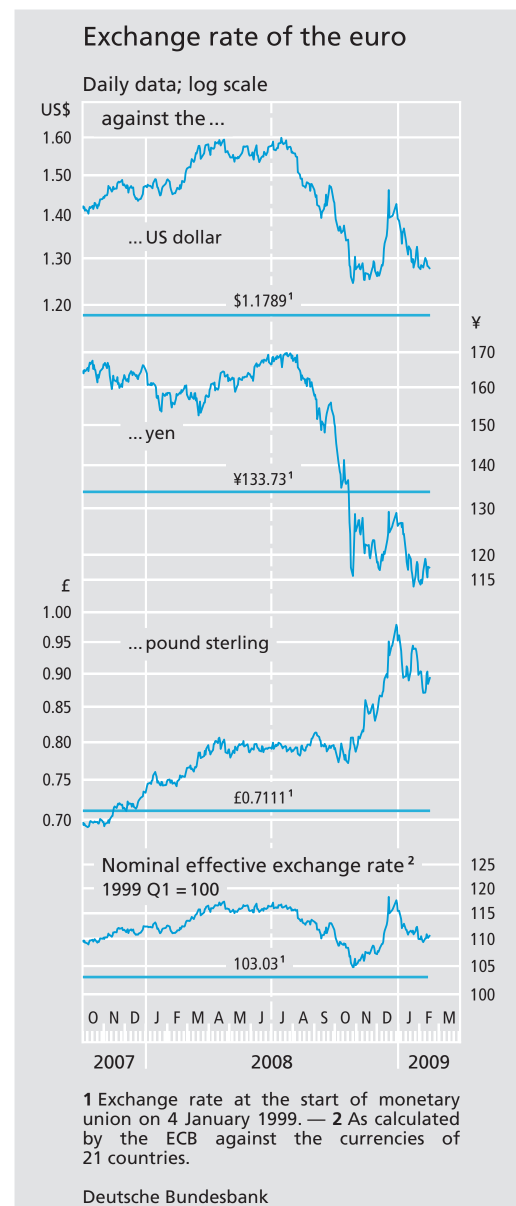
In November and at the beginning of December 2008, the euro-US dollar exchange rate range-traded in a fairly narrow band between US$1.25 and US$1.30. Following the publication of the surprisingly large drop in the ISM Manufacturing Purchasing Managers' Index in the USA, the euro rallied somewhat against the US dollar at the start of November after the previous noticeable depreciation; however, in view of the continually spreading fear of a global recession, it relinquished these gains again afterwards. Against this back-

ground, the Eurosystem's significant interest rate cuts in November and December 2008 had been generally anticipated in the markets and had no noticeable effect on exchange rate developments.

In mid-December, however, the euro appreciated abruptly against the US dollar, as the bleak outlook for the US economy was confirmed by the publication of weak labour market figures and the Federal Reserve cut its key interest rate to almost 0%. Within just six trading days, the euro-US dollar exchange rate climbed from US$1.30 to over US$1.46. It thus returned to its end-2007 level, but it was still just over 8½% below its record high of July 2008. However, just a short time later, there was a correction of this exceptionally strong exchange rate adjustment, and the euro-US dollar rate lost some of its gains. In 2009, too, the euro depreciated further against the US dollar. This was aided by recurring speculation regarding a cut in key interest rates by the Eurosystem, which actually occurred in mid-January. In addition, the new US government's extensive stimulus package is likely to have strengthened the dollar. In the second half of January, the downgrading of the sovereign rating of various European states was an additional burden on the euro. As this report went to press, the euro stood at US$1.26.

... against the yen ...

Against the yen, the euro experienced further net losses in the reporting period. The continued strength of the Japanese currency is mainly the result of the unwinding of yen-financed (international) investments (eg carry trades), whose risk has greatly increased with



1 Exchange rate at the start of monetary union on 4 January 1999. — 2 As calculated by the ECB against the currencies of 21 countries.

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the marked rise in exchange rate volatility. In mid-December, the euro only temporarily appreciated somewhat against the yen, after the Bank of Japan had reported a dramatic deterioration of the business climate among Japan's large manufacturers and had once again cut its key interest rate. The prospect of foreign exchange interventions held out by the Japanese government also weakened the yen in this period. After the turn of the year,

however, the euro relinquished these gains. Market expectations that interest rate differentials would continue to narrow, as well as the renewed increase in euro-yen volatility, put pressure on the euro-yen exchange rate. As this report went to press, the euro stood at ¥116; however, this was still about 30% above its historic low of October 2000.

... and against the pound sterling

The euro exhibited an upward trend against the pound sterling in the reporting period and reached a new record high of £0.98 shortly before the end of the year. This was aided by the interest rate cuts of 150 and 100 basis points carried out by the Bank of England in November and December respectively, which had been unexpectedly large according to market observers. In addition, concerns about the UK economy were fuelled by the announcement of a marked decline in industrial output. In January, the British pound stabilised, however, and the euro had to give up some of its gains. The Bank of England's two 50 basis point interest rate cuts at the beginning of the year, which had been generally anticipated by the markets, did not change this. As this report went to press, the euro-pound exchange rate was just under £0.89.

Effective euro exchange rate

During the period under review, the euro also rose against other currencies, sometimes significantly. Compared with the end of September, it recorded larger gains especially against the Polish zloty (+44%), the Hungarian forint (+26%), the Czech koruna (+20%) and the Romanian leu (+15%). Moreover, the euro appreciated noticeably against some commodity currencies. This was also reflected in the index of the effective euro, which recorded a new record high in mid-December and was 7% above its level at the start of monetary union when this report went to press. Taking into account the accrued inflation differentials between the euro area and its major trading partners, the real effective euro exchange rate was therefore well above its long-term average.[1]

Securities markets and portfolio transactions

Diverging capital market interest rates ...

Since the fourth quarter, the European bond market has been characterised by a reassessment of credit and liquidity risk. The average yield of ten-year euro-area government bonds slipped by about ½ percentage point compared with the end of September to just under 4% – in line with a much bleaker economic outlook, falling inflation rates and low central bank interest rates. As this report went to press, the corresponding Federal bonds (Bunds) were yielding around 3%, which represents a decline by 1 percentage point. The interest rate gap between German and other euro-area government bonds thus widened to just over 1 percentage point and temporarily reached its highest level since the introduction of the common currency (see chart on page 35).

... owing to differences in credit risk and liquidity

As the crisis escalated, Federal bonds appear to have been among the main beneficiaries of portfolio shifts to secure and easily realis-

1 The accession of Slovakia to the euro area means that the effective euro index has been calculated vis-à-vis 21 rather than 22 important trading partners since the beginning of the year.

able securities ("safe haven"). By contrast, future burdens on public budgets stemming from the unfavourable economic development are likely to have generally reduced the attractiveness of government bonds in the eyes of investors. The various government rescue packages for banks, especially the associated risk transfer to the public sector, had the same effect. However, this reassessment of credit risk differs among the euro-area countries, as is reflected, for example, by issuer-specific rises in the premiums on credit default swaps and changed rating agency assessments. On balance, not only has Germany's yield spread compared with all other euro-area countries widened since the end of September, the yield dispersion between the government bonds of all member states excluding Germany has also increased.

Bond yields in the euro area

Weekly averages

Source: Thomson Reuters and Bundesbank calculations. — 1 GDP-weighted yield of euro-area government bonds excluding Germany. — 2 Unweighted standard deviation of interest rate premiums of euro-area government bonds versus Germany.

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Steep German yield curve

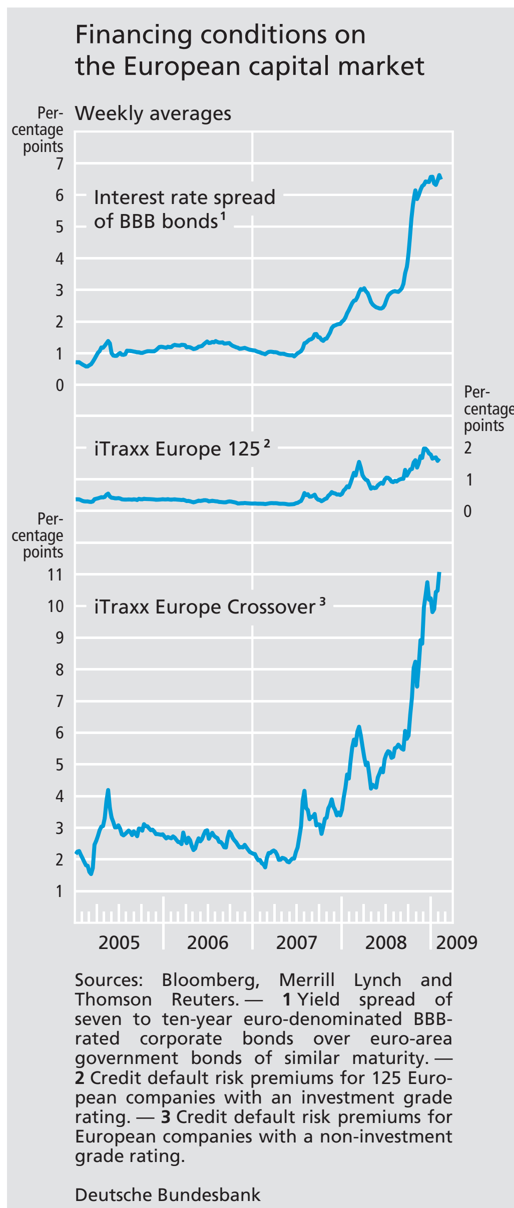
At the same time, the yield curve has steepened. In the case of Federal securities, the difference between ten and two-year yields has risen to just over 2 percentage points; this is the highest value since the start of monetary union. While short-term yields have fallen by around 1½ percentage point since the end of September in line with the partly already priced-in Eurosystem key interest rate cuts, the decline in longer-term yields was less pronounced – as mentioned above. This probably partly reflects the prospect of an increased supply of government bonds.

US yields declining

In the USA, government bond yields have, since the end of September, declined by around 1 percentage point across all maturities amid sharply falling inflation rates and declining central bank interest rates. In line with the key interest rate set at a corridor of 0% to ¼%, short-term US Treasury bills are trading at around ¼%. US government bonds, even more so than Federal bonds, are benefiting from their role as a safe and highly liquid investment opportunity. On balance, however, foreign investors have almost exclusively bought money market paper issued by the US government; the acquisition of long-term government bonds, by contrast, was comparatively low. In the USA, as in the euro area, uncertainty regarding future interest rate developments is still high by historical standards.

Significant deterioration in financing conditions for enterprises

Despite declining interest rates for government bonds, the financing conditions for enterprises active in the capital market have deteriorated significantly in the past few



Sources: Bloomberg, Merrill Lynch and Thomson Reuters. — 1 Yield spread of seven to ten-year euro-denominated BBB-rated corporate bonds over euro-area government bonds of similar maturity. — 2 Credit default risk premiums for 125 European companies with an investment grade rating. — 3 Credit default risk premiums for European companies with a non-investment grade rating.

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months. On the one hand, the dramatic share price losses were a factor. On the other hand, interest rate premiums on the bond markets have increased significantly. For European bonds of the lowest investment grade category (BBB) vis-à-vis government bonds, they were 638 basis points as this report went to press. Apparently, given the bleaker economic outlook, market participants view the default risk of corporate bonds much more pessimistically. This is also suggested by the sharp rise in the iTraxx Europe Crossover Index, which tracks the credit risk premiums of sub-investment grade European enterprises. Moreover, the wider bond spreads can probably also be explained by the greater uncertainty in the capital markets, a further increase in risk aversion and higher liquidity premiums.

Guaranteed bank debt securities

The guarantees of the Financial Market Stabilisation Fund – Financial Market Stabilisation Agency (SoFFin) made possible by the Financial Market Stabilisation Act have been used for four bonds issued by credit institutions, which have a volume of €15 billion and were brought to the market in January 2009.[2] In the secondary market, they are trading at a premium of just over ¾ percentage point vis-à-vis Federal debt securities with the same maturity.[3] This yield differential is comparable to the corresponding figures for bonds issued by the KfW and the Rentenbank, which, owing to their tasks, are provided with a Federal government guarantee or for whom the Federal government ensures solvency (maintenance obligation). The interest rate premium can therefore probably be attributed mainly to the lower liquidity of the individual issues compared with Federal securities.

Low net sales in the bond market

Issuing activity in the German bond market was very buoyant in the fourth quarter. In total, domestic debt securities amounting to €485 billion were issued, which represents an

2 The issuance statistics commented on later in this chapter refer to the fourth quarter of 2008 and therefore do not yet include the bonds mentioned here.
3 Measured by the par yield curve for German Federal securities.

historical high. However, redemptions were also at a record level (€432 billion), so that, on balance, after taking account of changes in issuers' holdings of their own bonds, €16 billion worth of bonds were sold (net). By contrast, domestic investors sold large quantities of foreign debt securities in the reporting period (€49½ billion), which were mostly denominated in euro. In total, the amount of debt securities in circulation in Germany was therefore reduced by €33½ billion; this is the so far greatest decline recorded in any one quarter.

Slightly higher general government borrowing

In the final quarter of 2008, the public sector raised €14½ billion in the capital market. Of this, €8½ billion were accounted for by the Federal government, which had slightly reduced the volume of outstanding paper in the third quarter (€1 billion). In the fourth quarter, the Federal government mainly issued ten-year Federal bonds (€6 billion) in net terms, but also raised shorter-term funds via two-year Federal Treasury notes and Bubills (€2 billion and €1½ billion, respectively) as well as "day bonds" (€2½ billion). By contrast, it redeemed five-year Federal notes and 30-year Federal bonds in net terms (€3½ billion and €1 billion, respectively). For the rest, the federal states increased their capital market debt by €6½ billion.

Significant net redemptions by credit institutions

In view of the difficult market conditions, credit institutions significantly reduced their capital market debt in the fourth quarter (€42½ billion), having issued a small amount of net new debt in the previous three-month period. They mainly redeemed public Pfandbriefe (€29 billion), whose outstanding volume has been decreasing for some time. Moreover, – despite record levels of gross issuance – other bank debt securities were redeemed in net terms (€9 billion). This category includes bank debt securities ("certificates") which allow particularly flexible structuring. Specialised credit institutions, including public promotional banks, also reduced the volume of their debt securities in circulation (€5½ billion). By contrast, mortgage Pfandbriefe were sold to the tune of €1 billion.

Investment activity in the German securities markets

€ billion

Item	2007	2008	
	Q4	Q3	Q4
Debt securities			
Residents	– 48.1	– 7.7	– 2.5
Credit institutions	25.4	4.4	10.5
of which			
Foreign debt securities	29.5	– 8.4	– 46.9
Non-banks	– 73.5	– 12.0	– 13.0
of which			
Domestic debt securities	– 50.5	– 5.7	– 10.2
Non-residents	86.6	29.6	– 31.0
Shares			
Residents	9.8	22.0	– 18.6
Credit institutions	5.3	2.6	– 12.3
of which			
Domestic shares	2.7	1.9	– 7.8
Non-banks	4.5	19.4	– 6.3
of which			
Domestic shares	– 3.0	18.9	6.7
Non-residents	3.5	– 15.3	4.4
Mutual fund shares			
Investment in specialised funds	9.2	7.3	0.3
Investment in funds open to the general public	– 0.3	– 2.9	– 11.3
of which: Share-based funds	– 0.1	– 1.2	0.5

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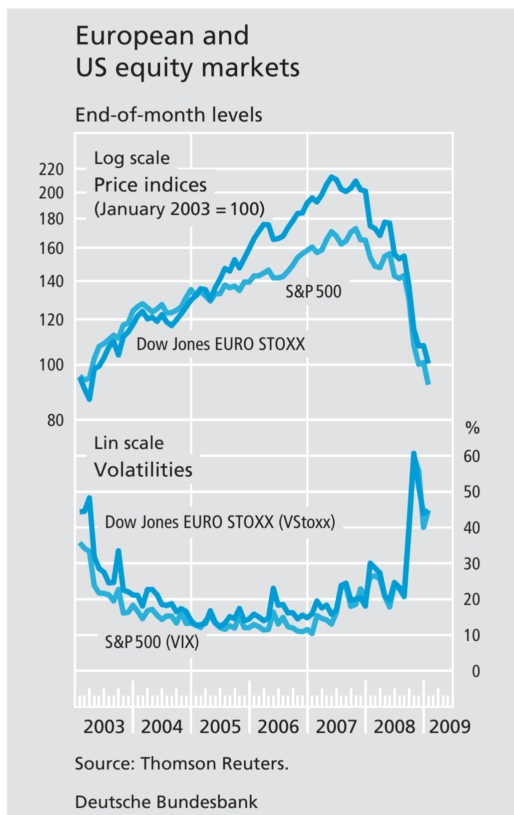
Issues by non-banks

Entities without a banking licence and not belonging to the government sector issued debt securities amounting to just over €44 billion from October to December 2008. About €38 billion of this is accounted for by securitisations by special purpose vehicles, which were



Source: Thomson Reuters.
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absorbed by the banking sector. Apart from that, enterprises mostly issued longer-term securities, while commercial paper was redeemed on balance.

Purchases of debt securities

Domestic credit institutions ultimately acquired debt securities amounting to €10½ billion in the fourth quarter. In net terms, €37 billion of this represented paper of domestic private issuers without a banking licence, including the securitisations mentioned above. Moreover, they bought paper issued by domestic banks amounting to €19½ billion net as well as government bonds (€½ billion). By contrast, they sold foreign debt securities worth approximately €47 billion. For the most part, this was money market paper, some of which had been issued by foreign special purpose vehicles. Domestic non-banks acquired German public-sector debt securities for €18½ billion, but were also net sellers of bonds brought to the market by private issuers (€28½ billion), which – provided that they were bank issues – do not benefit from the government's guarantee for bank deposits.[4] In addition, they slightly reduced their holdings of foreign debt securities (€3 billion). In the final analysis, foreign investors sold €31 billion worth of domestic debt securities, mostly paper of private issuers. Some of this constituted redemptions of financial products issued in Germany and sold "*en bloc*" to affiliated foreign enterprises ("certificates" and warrants).

Dramatic losses in the stock markets

On both sides of the Atlantic, the stock markets recorded massive losses in the reporting period. At the start of the fourth quarter, concerns about the overall state of the financial sector – which had arisen after the insolvency of a big US investment bank in September – continued to grow; in addition, the interplay between the financial crisis and the sharp deterioration in the outlook for the real economy increased investors' risk aversion. As a result, there were runs on shares at times. At the same time, market participants' uncertainty about further share price developments, as measured by the implied volatility of stock options, temporarily reached new record highs worldwide.

Towards the end of 2008, government interventions to support the financial sector, glob-

4 The purchase of securities by German non-banks is a statistical residual and therefore subject to a high degree of uncertainty. For more details, see Deutsche Bundesbank, German balance of payments in 2007, Monthly Report, March 2008, pp 26-27.

ally coordinated key rate cuts and the adopted stimulus packages brought about a certain stabilisation in the stock markets. However, as early as January 2009, reports of high losses in the banking sector and the need for more government support measures exerted further pressure on stock prices. Additionally burdened by declining earnings expectations, international share prices recorded further losses worldwide, with shares in the USA and in Japan – as measured by broad market indices – temporarily falling below their record lows of the second quarter of 2003. On balance, European shares lost 27% since the end of September 2008, while US and Japanese shares were down 29% and 31%, respectively, at the end of the period under review.

Stock market funding and stock purchases

Against the backdrop of the share price losses, issuance activity in the German stock market declined in the last quarter of 2008. Domestic enterprises issued €3½ billion worth of new shares, the vast majority of which were listed equities. By contrast, the outstanding amount of foreign equities in the German market decreased significantly (€17½ billion). Equities were purchased solely by non-resident investors (€4½ billion).[5] By contrast, domestic non-banks and credit institutions reduced their holdings of domestic and foreign shares by €6½ billion and €12½ billion, respectively.

Sales and purchases of mutual fund shares

Domestic investment companies recorded outflows of funds amounting to €11 billion in the reporting period after raising €4½ billion

5 For more details on direct investment, see p 40.

Major items of the balance of payments

€ billion

Item	2007 Q4	2008 Q3	2008 Q4
I Current account 1,2	+ 53.1	+ 35.5	+ 35.5
Foreign trade 1,3	+ 48.7	+ 40.0	+ 33.5
Services 1	– 2.2	– 7.7	– 1.7
Income 1	+ 14.5	+ 13.6	+ 13.3
Current transfers 1	– 5.8	– 7.9	– 6.5
II Capital transfers 1,4	– 0.7	– 0.3	– 0.6
III Financial account 1 (Net capital exports: –)	– 75.2	– 33.4	– 38.8
1 Foreign direct investment	– 39.5	– 10.2	– 17.3
German investment abroad	– 43.5	– 11.5	– 20.7
Foreign investment in Germany	+ 4.1	+ 1.3	+ 3.3
2 Portfolio investment	+ 85.1	+ 26.4	+ 50.6
German investment abroad	– 9.6	+ 14.5	+ 79.5
Shares	+ 6.7	+ 0.9	+ 14.2
Mutual fund shares	– 9.8	– 1.1	+ 15.5
Debt securities	– 6.5	+ 14.8	+ 49.7
Bonds and notes 5	– 0.4	+ 12.8	+ 23.4
of which Euro-denominated bonds and notes	+ 4.1	+ 12.0	+ 15.6
Money market instruments	– 6.1	+ 2.0	+ 26.3
Foreign investment in Germany	+ 94.6	+ 11.9	– 28.9
Shares	+ 7.5	– 15.6	+ 4.9
Mutual fund shares	+ 0.5	– 2.1	– 2.8
Debt securities	+ 86.6	+ 29.6	– 31.0
Bonds and notes 5	+ 70.3	+ 18.4	– 38.7
of which Public bonds and notes	+ 35.3	+ 17.3	– 4.8
Money market instruments	+ 16.3	+ 11.2	+ 7.7
3 Financial derivatives 6	– 27.2	+ 0.3	+ 9.3
4 Other investment 7	– 94.3	– 51.6	– 79.7
Monetary financial institutions 8	– 55.5	– 36.3	– 87.5
of which: short-term	– 19.5	+ 7.0	– 73.1
Enterprises and households	– 11.2	– 27.0	+ 28.6
of which: short-term	– 2.3	– 19.2	+ 26.9
General government	– 12.0	+ 13.2	– 8.8
of which: short-term	– 12.8	+ 13.4	– 9.2
Bundesbank	– 15.5	– 1.4	– 12.0
5 Change in reserve assets at transaction values (increase: –) 9	+ 0.7	+ 1.6	– 1.6
IV Errors and omissions	+ 22.9	– 1.8	+ 3.9

1 Balance. — 2 Including supplementary trade items. — 3 Special trade according to the official foreign trade statistics (source: Federal Statistical Office). — 4 Including the acquisition/disposal of non-produced non-financial assets. — 5 Original maturity of more than one year. — 6 Securitised and non-securitised options as well as financial futures contracts. — 7 Includes financial and trade credits, bank deposits and other assets. — 8 Excluding the Bundesbank. — 9 Excluding allocation of SDRs and excluding changes due to value adjustments.

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in funds in the preceding three months. On balance, the outflows affected only mutual funds open to the general public (€11½ billion), while the specialised funds reserved for institutional investors recorded inflows of funds amounting to €½ billion. Of the mutual funds open to the general public, mixed funds, mixed security-based funds and share-based funds were able to sell a small amount of certificates (€1 billion, €½ billion and €½ billion, respectively). By contrast, money market funds as well as open-end real estate funds and bond-based funds suffered outflows of funds (€6 billion, €5 billion and €3 billion, respectively). Funds were also withdrawn from funds operated by foreign companies and traded in the German market (€15½ billion). Domestic and foreign mutual fund shares were sold mainly by resident non-banks (€15½ billion), which, during the crisis, shifted large amounts of their funds to government-guaranteed bank deposits and public sector bonds. Net sales of mutual fund certificates by German credit institutions and foreign investors amounted to €8½ billion and €3 billion, respectively.

Direct investment

The combined total of cross-border securities transactions in the fourth quarter of 2008 shows net capital imports of €50½ billion. By contrast, in the area of direct investment, which is based less on short-term considerations, net capital exports amounted to €17½ billion. This was significantly higher than in the preceding three-month period (€10 billion).

German direct investment abroad

A key factor in this was that German proprietors provided their affiliates abroad with significant amounts of additional funds (€20½ billion). This was mainly equity capital (€13 billion). In addition, there was an outflow of funds abroad in the form of reinvested earnings and intra-group loans (€5½ billion and €2½ billion, respectively). German investment abroad was concentrated on the financial and energy sectors. The most important recipient countries were the Netherlands, Sweden and the United Kingdom. By contrast, domestic investors withdrew funds from France, Belgium and Luxembourg.

Foreign direct investment in Germany

Foreign firms also supplied their branches and subsidiaries in Germany with additional capital (€3½ billion in the final quarter of 2008, compared with €1½ billion in the preceding quarter). This was done mainly through the granting of credit (€2½ billion). In addition, reinvested earnings led to an increase in the capital base of branches in Germany.