## Financial markets

### Financial market setting

Financial market trends

In the months of autumn and winter, the sovereign debt crisis affecting several euro-area countries had an increasing impact on the core of the euro area. For the first time, rating agencies also downgraded the creditworthiness of previously top-rated debtors such as Austria and France. Moreover, diverging economic expectations shaped events on the financial markets. The assessment of economic prospects improved slightly of late. At the same time, market participants' risk aversion eased somewhat. This development can be attributed to the results of the summit of EU heads of state or government and to the consolidation and reform measures announced by the new Italian and Spanish governments. The monetary policy decisions taken by the Governing Council of the ECB were another supporting factor, as was the Fed's announcement that it would keep its benchmark rates low until 2014. After fluctuations had characterised the fourth guarter of 2011, the stock markets posted considerable price gains from the beginning of this year in particular, while yields on Bunds and US Treasuries moved within comparatively tight ranges, caught between safe haven flows and changing economic outlook assessments. On the foreign exchange markets, the euro came under pressure for much of the reporting period.

### Exchange rates

Euro depreciates against US dollar on balance since beginning of October Once again, the foreign exchange markets focused on the euro-dollar exchange rate. The single currency depreciated considerably from the end of October 2011 onwards, when the euro still stood at more than US\$1.40. First, the euro was burdened above all by a loss of investor confidence, beginning with Greece and spilling over into other euro-area countries. For example, the risk premiums on Italian and Spanish government bonds temporarily showed

a marked rise. Moreover, the big rating agencies downgraded or put on negative outlook the creditworthiness of a number of euro-area countries.

From December until mid-January, the diverging trends with regard to the economic prospects on either side of the Atlantic put the euro under additional pressure. Whereas the assessment of the euro area's growth prospects was more subdued than before, not least given the need for consolidation measures, the positive news from the US labour market in particular came as a surprise. Furthermore, mainly in the money market, the Eurosystem's interest rate cuts reduced the interest rate spread of the euro area vis-à-vis the United States. When it became increasingly clear that the cyclical downturn would also affect Germany, and after one of the big rating agencies finally downgraded French sovereign bonds, the euro fell to an exchange rate of US\$1.27 in mid-January.

The euro subsequently regained some ground against the US dollar thanks, *inter alia*, to a shift in interest rate outlook. The Eurosystem opted not to lower its key interest rates further, while the Fed announced that it would probably leave its key rate at close to zero until 2014. At the same time, the single currency benefited from a slight relaxation on the financial markets and the return of more favourable economic news from the euro area of late. By the end of the reporting period the euro stood at US\$1.30, which is equivalent to a depreciation of 4% since the beginning of the fourth quarter of 2011.

As against the US dollar, the euro fell against the yen from November onwards. This was partly because investments in yen were still considered to be relatively safe, whereas investors perceived risks in parts of the euro area to be increasing. Moreover, the interest rate differential between the euro area and Japan con-

Euro also down against the yen ...

# Recalculated weights for indicators of the German economy's price competitiveness

Indicators of price competitiveness are normally calculated as the weighted average of the relative price or cost development of a country compared with major trading partners. The Bundesbank regularly calculates and publishes such indicators for Germany.1 Both conceptually and in the calculation procedure used, the indicators are in line with the real effective exchange rates published by the European Central Bank for the euro.2 According to this procedure, the weight with which the trading partner is included in the indicator is determined on the basis of the respective trade flows of the countries involved. To take account of changes in the structure of the trade relations over time, a new matrix of trade links is used to calculate the current weights every three years. Previously, all indicator values from 2004 onwards were based on trade flows in the years 2004 to 2006.3 By contrast, the recalculated indicator values since 2007 now use weights derived from the trade links from 2007 to 2009.

The table on page 35 presents the recalculated weights which are used to compute the indicator of the German economy's price competitiveness against a broad group of 56 trading partners. The weights for indicators vis-à-vis narrower groups of countries are determined by rescaling the weights of the broad group.<sup>4</sup> The fluctuation in Germany's trade relations is re-

flected in distinct shifts in the weights, which is also shown in a comparison of the weights for the years 2004 to 2006 with those for the period from 2007 onwards. As in previous threeyear periods, the weight for China has increased further (to 81/2%). In their relative significance for the indicators, Germany's direct and indirect trade links with China are only exceeded by those with France (9%), albeit marginally. The weight for France decreased slightly, a finding which also applies to Italy, Spain, Portugal and Ireland, but not Greece. 5 One group of countries whose total relative significance for the indicator has increased almost as strongly as that of China is the central and east European countries that joined the European Union in 2004 and 2007. By contrast, continuing the development of previous years, the weights for the United States, the United Kingdom and Japan have declined, in part, noticeably.

The indicator based, from 2007 onwards, on the recalculated weights indicates that the German economy's price competitiveness has since developed somewhat more favourably than the previously used indicator showed (see adjacent chart). The indicator based on consumer price indices against the broad group of 56 trading partners showed a 7½% improvement in price competitiveness, whilst according to the previous calculation it was 6½%. A similar shift may be seen for an indicator which is calculated against a slightly narrower group of 36 countries (6½% instead of 5½% previously).



1 Inverted scale: rising curve (decline in values) denotes an increase in competitiveness.

1999 00 01 02 03 04 05 06 07 08 09 10 11 12

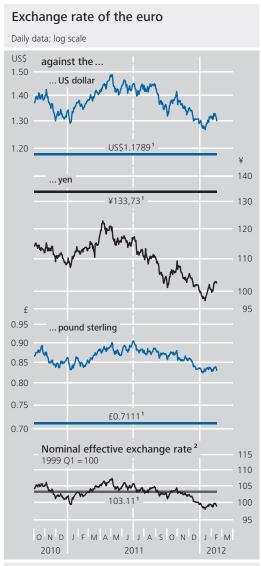
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- **1** See Table XI, 13 in the Statistical Section of the Monthly Report, for example.
- 2 The original calculation method is described in L Buldorini, S Makrydakis and C Thimann (2002), The effective exchange rates of the euro, ECB Occasional Paper No 2. However, this procedure was modified slightly at a later date. The modifications are explained in Deutsche Bundesbank, Monthly Report, May 2007, pp. 31-32.
- **3** The weights used previously are listed in the Deutsche Bundesbank, Monthly Report, November 2010, pp 42-43.
- 4 See Deutsche Bundesbank, Monthly Report, May 2007, p 32.
- **5** Greece's weight is unchanged, but at just under ½% is very small.

#### Weighting scheme for the price competitiveness indicator of the German economy against a broad group of 56 trading partners

Group of countries/country	Up to 19971	1998-2000	2001-2003	2004-2006	From 20072
Narrow group of countries	776.7	770.0	743.6	708.0	675
Belgium	54.1	48.0	51.9	56.1	55
Estonia	0.5	0.7	0.9	1.0	
Finland	10.7	11.1	11.0	10.9	10
France	109.1	106.3	100.0	92.8	88
Greece	4.7	4.5	4.3	4.4	4
Ireland	10.0	16.1	16.1	12.6	1
Italy	87.4	80.1	75.9	72.8	7(
Luxembourg	3.7	3.1	3.7	4.1	7 (
Malta	0.5	0.5	0.5	0.4	
Netherlands	61.3	64.7	63.2	67.2	70
Austria	43.8	42.3	41.1	41.8	42
Portugal	10.9	10.6	9.7	7.9	
Slovakia	5.5	6.9	9.1	10.3	1
Slovenia	5.1	4.7	4.5	4.5	į
Spain	35.8	37.3	38.0	39.4	38
Cyprus	0.3	0.3	0.3	0.4	(
Denmark	15.4	13.9	14.2	13.3	13
Sweden	22.5	20.9	19.1	20.4	19
United Kingdom	82.1	81.5	77.3	70.6	6
Norway	7.1	6.1	5.7	5.4	!
Switzerland	43.1	37.9	37.2	34.9	3!
Japan	61.0	54.6	44.9	39.2	34
Canada	8.1	8.7	8.9	8.3	
USA	94.0	109.2	106.1	89.3	7
	3	103.2		03.3	
Countries additionally included n medium-sized group	121.6	134.2	161.3	191.2	21
· · · · · · · · · · · · · · · · · · ·					
Bulgaria	1.2	1.3	1.6	2.1	
Latvia	0.5	0.7	0.9	0.8	
Lithuania	1.0	1.1	1.5	1.6	
Poland	18.6	21.8	25.1	27.0	33
Romania	4.0	4.3	5.4	7.0	
Czech Republic	16.9	20.7	26.1	25.7	30
Hungary	11.0	16.6	18.9	19.4	18
China	26.7	31.3	44.8	66.3	8
Hong Kong SAR	11.2	10.0	10.0	9.9	
Republic of Korea	16.2	13.8	14.5	19.0	1
Singapore	9.7	8.4	8.2	8.3	
Australia	4.6	4.2	4.3	4.1	
Countries additionally included					
n broad group	101.7	95.8	95.1	100.8	10
Iceland	0.3	0.5	0.5	0.6	
Israel	4.2	4.3	3.9	3.1	
Croatia	2.5	2.1	2.1	2.2	
Russia	12.4	9.7	11.8	16.0	19
Turkey	13.4	13.4	13.3	16.0	10
Algeria	0.4	0.3	0.4	0.5	
Morocco	1.3	1.4	1.3	1.2	
South Africa	5.7	5.6	6.1	6.5	
Argentina	2.1	1.8	1.2	1.2	
Brazil	8.1	7.3	6.4	7.0	
Chile	1.4	1.2	1.2	1.8	
Mexico	5.0	7.6	7.9	7.6	
Venezuela	0.8	0.8	0.7	0.6	
India	7.5	6.1	6.6	8.3	10
Indonesia	5.7	4.2	4.0	3.4	
Malaysia	7.3	6.6	6.6	6.1	
Philippines	2.6	3.2	3.5	2.9	
Taiwan	13.6	13.8	11.5	9.9	
Thailand	6.7	5.3	5.4	5.2	
New Zealand	0.7	0.6	0.7	0.7	(
Total Total	1,000.0	1,000.0	1,000.0	1,000.0	1,00

1 Basis 1995 to 1997. 2 Basis 2007 to 2009.



**1** Exchange rate at the start of monetary union on 4 January 1999. **2** As calculated by the ECB against the currencies of 20 countries.

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tracted. Despite the low nominal interest rates, real interest rates in Japan are also high by comparison. Although the pace of depreciation remained relatively moderate, at mid-January the euro fell to its lowest level against the yen since September 2000; it subsequently regained some of its value, however. This was attributable not only to the above-mentioned easing on the European financial markets but also to the less favourable economic data from Japan. As this report went to print, the euro stood at ¥102; this was 1½% down on the beginning of the fourth quarter of 2011.

The single European currency also lost ground against the pound sterling, particularly in December 2011. At that time, the euro was burdened by monetary policy easing in the euro area, whereas the Bank of England refrained from any additional monetary policy measures. At the end of the reporting period, the euro stood at £0.83, or 4½% lower than at the beginning of October 2011.

... and pound sterling

The euro depreciated by 3½% against the weighted average of the currencies of major trading partners from the beginning of the fourth quarter of 2011 onwards. Particularly high exchange rate losses were recorded above all in relation to the currencies of some commodity exporting countries and Asian countries, such as Australia, Canada, Singapore and South Korea, with the euro shedding between 6% and 12½%. This depreciation tended to improve the price competitiveness of euro-area suppliers.

Effective euro exchange rate

# Securities markets and portfolio transactions

Yields on ten-year German and Japanese government bonds dipped slightly again in recent months amid fluctuations, and as this report went to print stood at below 1.8% and 1% respectively. In the United States, yields on debt securities of the same maturity were virtually unchanged at just above 1.9%. For a time, diverging economic data had led to a marked widening of the interest rate differential between the USA and Germany to more than 30 basis points. Conversely, market participants' concerns that the, in some cases, very high sovereign debt of some euro-area countries might not be contained on a sustained basis helped trigger a temporary, sharp rise in yields on Bunds. However, a countermovement set in at the end of November which was generated by a number of factors: first, the summit results aimed at strengthening the instruments for increasing budgetary discipline were well received. Second, the package of non-standard

International bond markets

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monetary policy measures taken by the Eurosystem and the Fed seemed to be having an effect. After the beginning of the year, market observers began – with a time lag in relation to the United States – to take a less pessimistic view of the euro-area economic situation as well. The brighter sentiment was evidenced by a pronounced decline (by more than three percentage points) in the implied volatility of options on the Bund future, which is an indicator of investor uncertainty. At somewhat over 7%, the level is now no longer substantially above the five-year average. In the USA, the equivalent figure for options on US Treasuries is, at 5.6%, even close to the pre-crisis level.

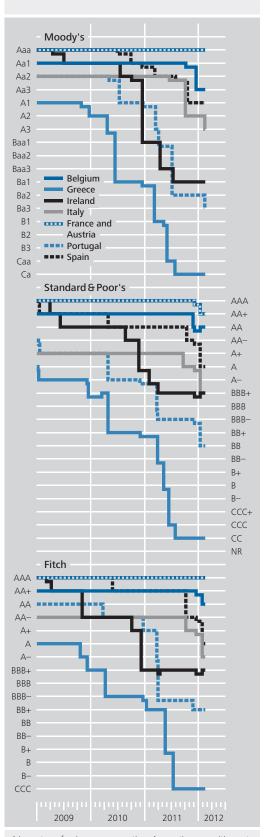
Yield curve shifted downwards

Monetary policy decisions are also reflected in the German yield curve. Thus, the effect of the key rate cut in the euro area and the longerterm funding opportunities was felt in the capital market. Particularly the three-year maturity range, which the longer-term tender operation of December now covers for the first time, responded clearly, with yields falling by more than 40 basis points. The interest rate differential between ten and three-year maturities increased discernibly, although the ten-year yield slipped by a further 13 basis points from a low level. This reflects the strong demand for Bunds, whose role as euro-area benchmark was consolidated in the reporting period after the series of downgrades.

Yield spreads in the euro area

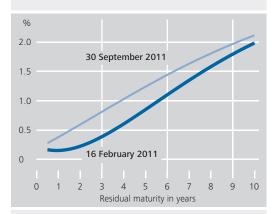
By contrast, intra-euro-area yields widened further from the end of September 2011. At mid-February, the yield spread of long-term sovereign bonds of the other euro-area countries over Bunds of the same maturity was, at 380 basis points, almost 90 basis points above the level at the end of the third quarter of 2011; indeed, the spread temporarily climbed to a record high of more than 400 basis points. Besides liquidity aspects, this divergence primarily reflects differences in how investors assess the creditworthiness of sovereign issuers. Moreover, the potential commitments the euro-area countries have entered into as part of the rescue measures call the government guarantors'

#### Ratings of selected European countries\*



\* Long-term foreign currency rating. A negative or positive outlook is equivalent to one-third of a notch. Deutsche Bundesbank

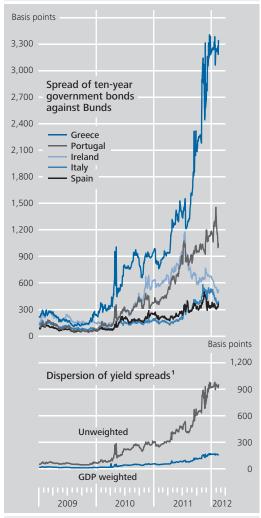
# Yield curve on the German bond market\*



\* Interest rates for (hypothetical) zero-coupon bonds (Svensson method), based on listed Federal securities. Deutsche Bundesbank

#### Yield spreads in the euro area

Daily data



Sources: Thomson Reuters and Bundesbank calculations. **1** Standard deviation of yield spreads of euro-area government bonds.

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credit quality into question. Thus, rating agencies downgraded the credit quality of nine of the 17 euro-area member countries by at least one notch in the reporting period. Countries which had previously been Triple-A debtors, such as France and Austria, were also affected. With regard to Greece, market participants were unsettled by the fact that the country looked as if it would not meet primary objectives of the agreed consolidation programme. In addition, negotiations with private creditors about taking a voluntary haircut on their claims proved to be tough. The markets are burdened by the fact that, if the talks failed and without a new financial adjustment programme, the preconditions for a second rescue package that has become necessary in the meantime would not be fulfilled. Yields on Portuguese sovereign bonds, too, rose temporarily to more than 16%. What is more, doubts were growing among market participants as to whether Portugal's government debt, though considerably lower than that of Greece, is sustainable. This was probably partly because the country is in a recessionary phase and the structural reforms that have been initiated will only lead to growth stimuli with a time lag.

In contrast to Greece and Portugal, yields on ten-year sovereign bonds of the other euroarea peripheral countries fell from the end of November onwards. The summit results of October, December and January, which market participants interpreted as a first sign of sounder public finances, also contributed to this development. The consolidation plans of the new governments in Italy and Spain were likewise viewed positively. The Eurosystem's monetary policy measures, which had a calming effect on financial market conditions, were probably another important reason for the decline in yields.

The yields on bonds of BBB-rated European enterprises fell to 5.6% in the reporting period; this is about 80 basis points below the five-year

Financing conditions for enterprises improved

average. 1 The interest rate spread over Bunds narrowed to 395 basis points. The decline in bond yields was driven in particular by financial enterprises, for which financing conditions improved noticeably amid signs of a certain degree of relaxation on the market for government debt securities. Bonds issued by real economic enterprises also posted falling yields, however. The improved financing conditions for euro-area enterprises are in line with receding risk aversion and appreciably reduced stock market uncertainty. This is reflected, moreover, in the European credit default swaps markets, where the premiums on CDS for enterprises of both the financial sector and the real economy contracted.

Decline in bond market issuance Gross issuance figures in the German bond market fell slightly in the final quarter of 2011. Overall, German borrowers issued paper worth €339½ billion, compared with €347½ billion in the previous three months. Taking account of redemptions and changes in issuers' holdings of their own bonds, however, domestic issuers scaled back their capital market borrowing to a considerably greater extent, namely by €44½ billion. In the fourth quarter, domestic investors sold only a low volume of foreign debt instruments. Thus, the total outstanding volume of bonds in Germany fell by €45½ billion in the quarter under review.

Repayments by enterprises down markedly In the quarter under review, domestic enterprises redeemed €23 billion of their own bonds. Non-bank financial enterprises in particular cut back their capital market debt sharply (-€21½ billion). The redemptions possibly reflect the, at times, very low level of confidence that market participants placed in their financial counterparts in the reporting period. By contrast, nonfinancial corporations have been much less directly affected by the sovereign bond crisis; on balance, they left their capital market debt virtually unchanged at -€1 billion. Furthermore, there are signs that issuing activity by domestic enterprises via foreign financing subsidiaries - which is not included in domestic sales statistics - picked up noticeably of late.

# Investment activity in the German securities markets

€ billion

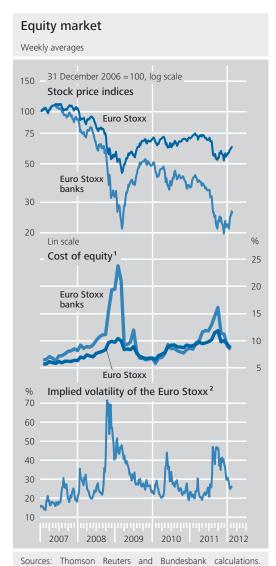
	2010	2011	
Item	Q4	Q3	Q4
Debt securities Residents Credit institutions of which	106.3	- 4.0	- 9.9
	- 28.9	- 34.0	- 31.9
Foreign debt securities  Deutsche Bundesbank  Other sectors  of which	- 21.4	- 18.3	- 22.7
	2.3	21.6	13.8
	132.8	8.4	8.2
Domestic debt securities	3.4	9.2	- 0.4
Non-residents	8.9	18.9	-35.6
Shares Residents Credit institutions of which Domestic shares Non-banks of which Domestic shares Non-residents	25.9	- 8.1	15.4
	9.0	- 12.0	7.2
	7.7	- 7.1	2.5
	16.8	4.0	8.2
	6.4	12.5	5.2
	– 2.6	- 5.0	- 5.5
Mutual fund shares Investment in specialised funds Investment in funds open to the general public of which Share-based funds	23.4 2.7 4.0	5.6 0.2 0.7	22.6 - 2.7 0.8

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Given favourable tax revenues, public sector debt was reduced by €10½ billion in the fourth quarter of 2011 (including transactions by the resolution agencies). Above all, the Federal government redeemed Federal Treasury discount paper (Bubills) totalling €15½ billion as well as 5-year Federal notes (Bobls) worth €5½ billion and two-year Federal Treasury notes (Schätze) worth €1 billion. By comparison, ten and 30-year bonds were issued totalling €11 billion and €2½ billion respectively. The tenyear bond floated in November, which in a difficult market environment had met with a comparatively low level of bids in terms of the target issue volume, was topped up at an all-time low average return of just above 1.8% in January 2012. For the first time, Federal money market paper with a six-month maturity even posted a negative return in early January. The

Redemption of public sector debt securities

<sup>1</sup> Yields on BBB-rated corporate bonds in the iBoxx bond index are used as a basis. This index covers bonds issued by banks and non-banks.



1 End-of-month levels; calculated from three-stage dividend discount model using three to five-year IBES expectations of profit growth. 2 Expected future volatility, calculated from prices of options on the Euro Stoxx.

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Federal states tapped the bond market for €7

billion net in the months October to December.

Net redemption of bank debt

securities

In the final quarter of 2011, domestic credit institutions reduced their capital market debt by €11 billion. Public Pfandbriefe in particular (€7 billion) as well as other bank debt securities which can be structured flexibly (€5½ billion) were redeemed, whereas the outstanding volume of Mortgage Pfandbriefe and debt securities of specialised credit institutions including the public promotional banks rose slightly (€1½

billion and €½ billion respectively).

In the fourth quarter of 2011, debt securities in Germany were purchased by the Bundesbank as part of the Eurosystem's securities purchase programmes (€14 billion) as well as by domestic non-banks, which added shares worth €8 billion net to their portfolio.2 In both cases, almost only foreign paper was bought. By contrast, foreign investors and domestic credit institutions sold debt securities totalling €35½ billion and €32 billion respectively. Sales by credit institutions focussed on foreign bonds including paper issued by borrowers in euroarea countries whose public finances are under strain. The sales figures are ultimately a reflection of the greater credit risk which market participants are now taking into account and in light of which they are reassessing their investments.

securities

Purchase of debt

In the fourth quarter of 2011, the international equity markets were also affected by the euroarea debt crisis, economic-policy measures taken to contain the crisis and, of late, by improving global economic perspectives. Up to the end of November, investors alternated between confidence rekindled by, *inter alia*, the EU summit resolutions at the end of October and prospects of a strengthened capital base at financial institutions, and concerns about an escalation of the debt crisis in the euro-area peripheral countries. In this context, market participants focussed on Italy in particular. Equities were initially not able to post sustained price gains in this setting.

International equity markets between debt crisis and improving economic activity

The consolidation and reform programmes in Italy and Spain, which met with a positive response from market participants, the successful sovereign bond issues in a number of euro-area countries and the above-mentioned measures taken by the central banks increasingly boosted stock market investors' confidence, however.<sup>3</sup>

**<sup>2</sup>** However, this figure is calculated residually, as no reporting obligation exists specifically for non-banks; it is therefore subject to considerable uncertainty.

**<sup>3</sup>** Thus, the implied volatility of stock options, a measure for market players' uncertainty, declined perceptibly and was below the five-year average of late.

Furthermore, brighter economic signals such as favourable US labour market data and positive economic indicators for Germany contributed towards the rise in stock prices. The rather mixed quarterly results for US and European enterprises and the downward revision of earnings expectations — which were especially pronounced for European banks — are likely to have dampened stock market developments per se. Ultimately, however, these negative factors did not have a discernibly adverse impact on equity prices.

On balance, price gains on German and European equities, measured against the broadbased CDAX and Euro Stoxx indices, amounted to 22% and 14% respectively from the end of September; US stocks (S&P 500) posted an increase of 20%. Price gains on Japanese stocks (Nikkei) were, at 6%, considerably lower, with the strong yen in particular burdening Japanese enterprises. Compared with the European market as a whole, European bank stocks recorded a smaller increase in prices of 8%, whereby bank stocks from euro-area peripheral countries – with the exception of Ireland – slowed the development of European bank stock prices.

Cost of capital down appreciably The capital costs of European listed enterprises (Euro Stoxx), which are composed of the safe real interest rate and the equity risk premium and can be calculated using a dividend discount model, dropped appreciably in the reporting period. Latterly they amounted to 8½%, which was only slightly above the five-year average (8%). The decline is attributable exclusively to investors demanding a lower risk compensation for an investment in shares.

Low level of stock market funding

On balance, funding on the German stock market totalled €2 billion in the reporting quarter. In addition, the outstanding volume of foreign shares in Germany rose by €7½ billion. Shares were acquired exclusively by domestic investors on balance. Domestic non-banks added shares worth €8 billion to their portfolios; meanwhile, domestic credit institutions increased their ex-

#### Major items of the balance of payments

€ billion

	2010	2011		
Item	Q4	Q3	Q4	
I Current account <sup>1, 2</sup> Foreign trade <sup>1, 3</sup> Services <sup>1</sup> Income <sup>1</sup> Current transfers <sup>1</sup>	+ 47.9 + 41.0 + 2.3 + 14.2 - 6.5	+ 29.8 + 39.2 - 6.4 + 13.5 - 10.3	+ 43.9 + 40.2 + 1.2 + 13.4 - 5.6	
II Capital transfers1, 4	- 0.5	+ 0.1	- 0.1	
III Financial account <sup>1</sup> (Net capital exports: –)	- 50.0	- 18.9	- 36.4	
1 Direct investment German investment	- 1.0	+ 2.0	+ 5.1	
abroad Foreign investment in Germany	+ 10.3	- 5.6 + 7.6	- 5.9 + 10.9	
2 Portfolio investment	- 107.7	+ 30.6	- 43.2	
German investment abroad Shares Mutual fund shares Debt securities Bonds and notes <sup>5</sup> of which	- 115.7 - 2.3 - 3.2 - 110.3 - 115.9	+ 12.3 + 11.5 + 3.4 - 2.6 + 1.8	- 3.0 - 5.7 + 1.7 + 1.0 - 9.3	
Euro-denominated bonds and notes Money market	- 60.7	+ 3.1	- 11.5	
instruments Foreign investment	+ 5.6	- 4.4	+ 10.3	
in Germany Shares Mutual fund shares Debt securities Bonds and notes <sup>5</sup> of which Public bonds and	+ 8.0 - 2.1 + 1.2 + 8.9 - 7.3	+ 18.3 - 4.5 + 3.9 + 18.9 + 5.3	- 40.2 - 5.4 + 0.9 - 35.6 - 21.9	
notes Money market	+ 8.4	+ 9.6	+ 5.2	
instruments	+ 16.3	+ 13.6	- 13.8	
3 Financial derivatives <sup>6</sup>	+ 0.3	- 7.2	- 5.4	
4 Other investment?  Monetary financial institutions8  of which short-term Enterprises and	+ 58.9 + 47.0 + 21.1	- 43.6 + 56.2 + 66.6	+ 7.4 - 50.8 - 34.0	
households of which short-term General government of which short-term Bundesbank	- 9.6 + 0.3 + 33.8 + 74.9 - 12.3	- 7.6 - 6.8 + 17.9 + 15.4 - 110.0	+ 41.1 + 23.6 - 1.6 - 2.8 + 18.7	
5 Change in reserve assets at transaction values (increase: –)9	- 0.5	- 0.6	- 0.4	
IV Errors and omissions	+ 2.6	- 11.1	- 7.3	

<sup>1</sup> 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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posure to equities by €7 billion. Whereas non-banks tended to buy more domestic shares, foreign paper was the main focus of interest for credit institutions. Non-resident investors sold German equities to the value of €5½ billion.

Strong sales of mutual fund shares

During the reporting period, domestic investment companies recorded inflows of €20 billion, after raising €6 billion in the previous quarter. On balance, the fresh funds flowed solely into specialised funds reserved for institutional investors (€22½ billion). Of the funds open to the general public, only share-based funds and open-end real estate funds attracted inflows (€1 billion and €½ billion respectively), whereas mainly bond funds and mixed securities-based funds recorded outflows (€2 billion and €1½ billion respectively). The outstanding volume of foreign mutual fund units in Germany fell by €1½ billion.

As usual, mutual fund shares were bought mainly by domestic non-banks, which added €21½ billion worth of fund shares to their portfolios. This involved only shares in domestic mutual funds. Non-resident investors acquired mutual fund shares worth €1 billion, while domestic credit institutions disposed of fund shares to the value of €4 billion.

#### Direct investment

Inflows in direct investment

In contrast to cross-border portfolio investment, which posted net capital exports (€43 billion) in the fourth quarter, direct investment

resulted in net capital imports (€5 billion). With that, the trend of moderate direct investment inflows seen in the previous two quarters was continued.

Again, this mainly resulted from direct investment by foreign enterprises in Germany (€11 billion, after €7½ billion in the third quarter). Non-resident group parent companies granted their domestic affiliates direct investment loans in particular (€8½ billion). Transfers of funds in the form of reinvested earnings and equity capital together came to €2½ billion. Germany proved to be an attractive destination for direct investment primarily for enterprises from other European countries (€7 billion), notably Belgium and Denmark. A significant part of the funds was channelled into manufacturing, notably the chemical industry.

Domestic enterprises also provided their foreign affiliates with capital (€6 billion, after €5½ billion in the previous quarter). In this context, an important role was played by reinvested earnings (€7½ billion), although this amount is currently still largely based on estimates. Emerging market and developing countries were a geographical focus of German direct investment abroad (€3½ billion), above all in Asia. Among the industrial countries, the emphasis was on European locations (€3½ billion), although the picture here was very mixed. Whereas affiliates in Luxembourg (€4½ billion) and Sweden (€3½ billion) recorded high capital inflows from Germany, there was a large-scale withdrawal of liquidity (€13 billion) from the Netherlands, mainly through reverse loans.