Financial markets

Financial market developments

Turmoil in the financial markets amid insufficient consolidation progress in the peripheral countries

Since mid-year, financial market developments have been very largely shaped by heightened uncertainty over the future course of the sovereign debt crisis in several euro-area countries. The measures agreed by the heads of state or government at the end of July 2011 to contain the crisis have ultimately failed to dispel market participants' doubts concerning the sustainability of the public finances of the peripheral countries. Moreover, the summit resolutions adopted at the end of October – which among other things provide for a voluntary private sector involvement of 50% in a Greek aid plan yet to be negotiated, greater capital buffers for banks and extended powers for the EFSF – brightened the sentiment on the equity and bond markets only temporarily. The political situation in a number of euro-area countries was assessed as still fragile, notably in Greece, where there was brief talk of a referendum and where – as in Italy – the old government has since resigned and a new one has been formed. The swift and resolute implementation of the necessary reforms to strengthen economic growth and the consolidation measures aimed at restoring confidence in the markets did not appear to be assured in all cases. In particular, financial markets focused on the problem of high public debt levels and weak growth prospects in Italy. Thus, for the first time, investors who had been observing the problems in the euro area also turned their attention to member states with a big economy. Another factor burdening the markets was that, compared with the second quarter of 2011, the economic pros-

pects were growing increasingly dim. Surveys revealed that, besides the renewed escalation of the sovereign debt crisis, the long-term growth expectations for the year ahead have been constantly revised downwards on both sides of the Atlantic. International organisations, too, have lowered their growth forecasts (see page 13). Overall, the stock markets of the major industrial countries have seen substantial price losses since the end of June and – amid strong safe haven flows into Bunds and US Treasuries – spreads in euro-area bond yields have widened further. On the foreign exchange markets, the euro has depreciated on balance.

Exchange rates

Euro depreciates against US dollar since mid-year

Since the third quarter, movements on the foreign exchange markets have to a large extent been influenced by developments in the euro area. This is especially true of the euro-dollar exchange rate. In July and August, investor uncertainty driven by high government debt levels on both sides of the Atlantic kept the euro within a corridor of between US$1.40 and US$1.45. However, the economic outlook in the euro area gradually deteriorated, leading the market to expect the Eurosystem to refrain from further key interest rate increases for the time being. When, after the ECB Governing Council meeting at the beginning of September, it was announced that the growth forecast by ECB staff had been revised downwards, market participants increasingly felt interest rate cuts to be possible also in the euro area. Moreover, there was a growing incidence of negative political news from the euro area during the third quarter. At the beginning of August, the Italian government cast doubt over the implementation of the austerity measures that had already been announced. Additionally, the temporary breakdown of talks in Athens of EU, ECB and IMF representatives as well as the announcement by Greece that it would probably miss the fiscal deficit target for 2011 fuelled speculation about a possibly impending Greek default. The gradual downward revision of interest rate expectations in the euro area paired with investors' growing fears of the sovereign debt crisis escalating depressed the euro in September. At the beginning of October, the euro dropped to US$1.32, its lowest level since January 2011. However, political measures were taken in the course of the month to contain the sovereign debt crisis. This led to a temporary appreciation of the euro against the dollar, the single currency climbing to a level of US$1.42 by the end of October.

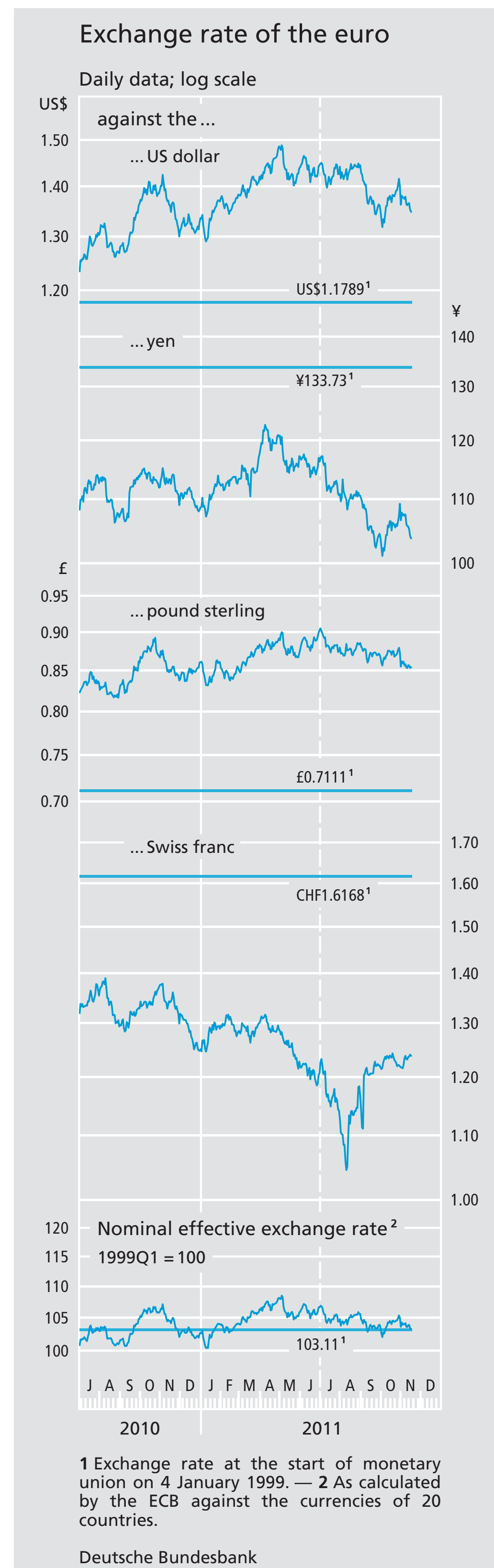
The euro again depreciated early in November when the Greek government briefly considered holding a referendum about the aid measures. The uncertain political situation further fuelled uncertainty over the development of the sovereign debt crisis, with Italy also attracting greater attention from the financial markets. Moreover, further news pointing to weakening economic activity in the euro area put the single currency under additional pressure. As this report went to print, the euro stood at US$1.35; this is 6½% down on its mid-year level.

Euro also down against the yen …

During the period under review, the euro also depreciated against the yen on balance, despite temporarily regaining some lost ground in October given the above developments in the euro area. Latterly it stood at ¥104, or 10½% below its mid-year value. Among other things, the yen profited from the markets' assessment that investments in the Japanese currency were less risky than in other currency areas. What is more, it was found that Japan is recovering more quickly from the natural and nuclear power plant disaster in March than many had expected. The appreciation of the yen, notably against the US dollar, caused the Japanese Ministry of Finance to resort to unilateral foreign exchange market intervention at the expense of the domestic currency in early August and at the end of October. Despite the yen's current nominal strength against the US dollar and the euro, the Japanese currency is at present trading, in real terms, close to its long-term average, and therefore by no means at exceptionally high levels. Nor was there any excessively high nominal exchange rate volatility vis-à-vis the US dollar or the euro of late that would have made foreign exchange market interventions appear necessary.

… and against the pound sterling

After the euro came under pressure against the pound sterling at the beginning of July, it subsequently proved to be relatively stable, trading at between £0.86 and £0.89. The British economic outlook deteriorated on a scale similar to that in the euro area. Furthermore, the pound sterling was burdened by extremely strong inflationary pressures which continued to rise until the end of the third quarter, and which in combination with the



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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very expansionary bias of monetary policy led to high negative real interest rates. Towards the end of the reporting period, the euro stood at £0.85, or 5½% lower than at mid-year.

Minimum exchange rate of the Swiss franc against the euro

The growing government debt levels in several industrial countries and the high degree of uncertainty felt by investors led to substantial capital flows to Switzerland into the third quarter, resulting in a marked depreciation of the euro against the Swiss franc. For a time the euro fell to an all-time low of CHF1.05. After the Swiss National Bank countered this development first by further easing monetary policy, it set a minimum exchange rate of CHF1.20 per euro in early September and announced that it would buy foreign currency in unlimited quantities to defend it. The Swiss National Bank justified this intervention by arguing that the Swiss currency was massively overvalued, which posed an acute threat to the Swiss economy and harboured deflation risks. Since then, the euro has traded within a band of CHF1.20 to CHF1.24.

Effective euro exchange rate

Since the middle of the year, the euro has depreciated by 3% in effective terms vis-à-vis the currencies of 20 major trading partners. It is therefore roughly at the same level as at the start of monetary union.

Securities markets and portfolio transactions

Economic worries and safe haven flows affect international bond markets

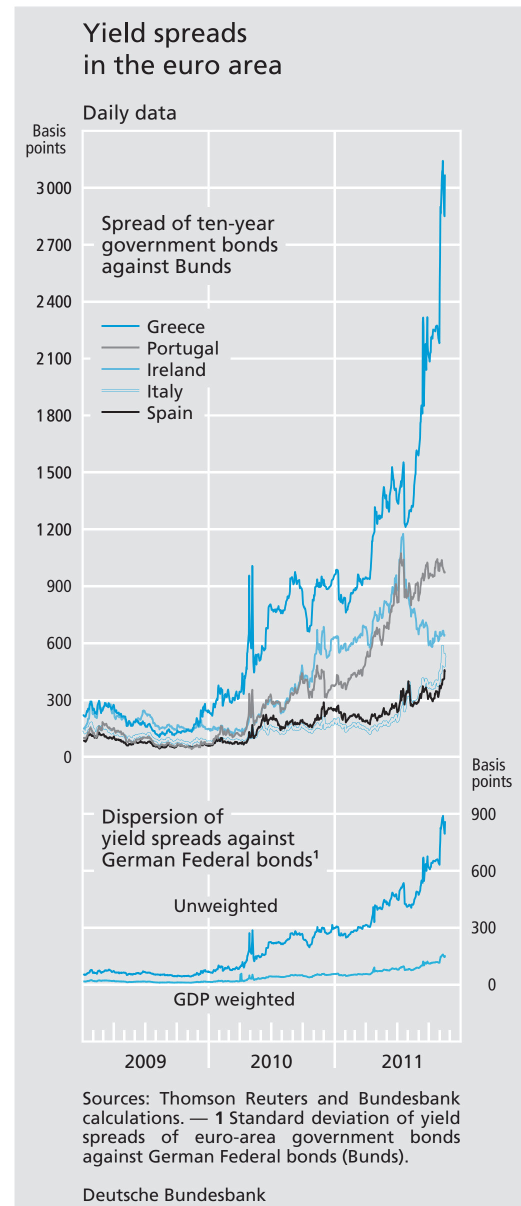
Demand for safe and liquid investments dominated activity on the international securities markets in recent months,[1] causing interest rates on the German and US sovereign bond markets to drop sharply. Yields on ten-year US Treasuries declined amid fluctuations from 3.2% at the end of June to 2.0% of late. As this report went to print, German Bunds with the same maturity were yielding 1.7%, which is also more than one percentage point lower than at mid-year. During the course of the third quarter, long-term interest rates on either side of the Atlantic fell, for a time, to record lows of around 1.6% for Bunds and 1.7% in the US. In October there was only a temporary countermovement, which reflected also the short-lived relief at the agreement reached at the EU summit. In early November, however, the political uncertainty in Greece and Italy paired with gloomier economic forecasts again depressed yields. The return on ten-year Japanese government bonds fell slightly, by 14 basis points to just shy of 1%, from mid-year onwards.

Yield spreads within euro area reach record level

Yield spreads within the euro area widened sharply again from the middle of the year onwards. Up to mid-November, the GDP-weighted yield spread of long-term sovereign bonds of the other euro-area countries over Bunds of the same maturity rose to a new high of 459 basis points, despite substantial bond purchases by the Eurosystem under the Securities Market Programme (SMP). However, this average conceals considerable het-

1 The increased uncertainty among market participants was reflected, for example, in the higher implied volatility of options on Bund futures. At the same time the spread between Federal government-guaranteed KfW bonds and Bunds, which can be interpreted as an indicator of investors' preference for liquidity, widened perceptibly. In the US, too; similar figures point to a flight into the quality and liquidity of US Treasuries.

erogeneity among the individual countries. Among the so-called programme countries, ten-year Greek bond yields reached a new high (of more than 33%)[2] – in low turnover – after negative real economic and fiscal news and in the light of heightened political uncertainty. However, Greece currently does not need to raise funds on the market. In Italy and Spain, too, however, which drew greater attention from the markets in the third quarter, investors' growing risk aversion as well as rating downgrades led to an increase in yields to 7.2% and just below 6.8% respectively of late. Even Austrian and French sovereign bonds, yields on which usually move in fairly close synchrony with those on Bunds, have profited only to a limited extent from safe haven flows since mid-year. The spread between them and German paper has likewise widened as a result, to 193 and 207 basis points respectively. The yield level even in these countries (3.6% and 3.8% respectively) is still comparatively low, however. By contrast, the long-term yield on Irish sovereign bonds declined from the third quarter onwards; as this report went to print, it stood at 8.4%, compared with more than 14% at the middle of July.



Sources: Thomson Reuters and Bundesbank calculations. — 1 Standard deviation of yield spreads of euro-area government bonds against German Federal bonds (Bunds).

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Yield curve of Bunds shifted downwards

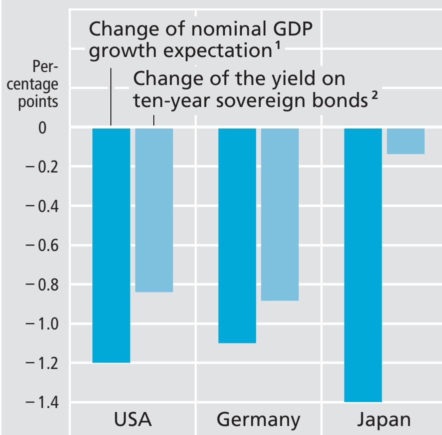
Since mid-year, strong demand for Bunds has pushed the German yield curve downwards largely in parallel across the entire maturity spectrum by more than one percentage point. The interest rate differential separating ten and two-year maturities edged up slightly from 155 to 158 basis points. The decline in interest rates at the short end reflects both the resolved interest rate cut and expectations of lower rates to come.

Financing conditions for enterprises slightly worse

Yields on BBB-rated European corporate bonds with a residual maturity of seven to ten years rose to 6.8% in the reporting period, which is roughly in line with the five-year average.[3] This increase was attributable

2 Yields on short-term Greek bonds are even substantially higher given market participants' fear of massive losses under a debt restructuring.
3 Yields on BBB-rated corporate bonds in the iBoxx bond index serve as a basis. This index covers bonds issued by banks and non-banks.

Interest rate developments and change in economic expectations



Sources: Consensus Economics and Bundesbank calculations. — **1** Expectations for the year 2012 according to Consensus Forecast (October survey less June survey 2011); calculated from expected real GDP growth plus expected consumer price inflation. — **2** October 2011 vs June 2011, at the time of the survey in each case.

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almost exclusively to enterprises of the financial sector. Given the high risk of losses from exposures to sovereign bonds, financial institutions most recently borrowed on the capital market at 12.9% for longer maturities; this is considerably higher than what non-financial enterprises paid (5.1%). This discrepancy is also reflected in the development of the iTraxx Europe 125 Index, which tracks the credit risk premiums of big European enterprises and which also rose in the reporting period primarily because of financial enterprises. In a number of euro-area peripheral countries, notably in Italy, financing conditions for non-financial corporations have also deteriorated since mid-year, however. Nevertheless, there is no indication of developments in the sovereign debt markets of the euro-area peripheral states having a stable systematic influence on the financing conditions for the respective non-financial corporations.

Higher net sales in the bond market

In the third quarter of 2011, gross issue volume in the German bond market amounted to €347½ billion, which was just below the level for the previous quarter. After deducting the higher redemptions and taking account of changes in issuers' holdings of their own bonds, net sales of domestic debt securities came to €12½ billion. In addition, foreign borrowers placed debt securities worth €2 billion on the German market.[4] Thus, funds totalling €14½ billion were raised on the German bond market in the reporting period.

Public sector borrowing

The public sector raised €15½ billion in the bond market in the third quarter, compared with €35½ billion one quarter before. Here, central government (including FMS Wertmanagement) issued mainly Federal notes (€11 billion), and to a lesser extent 30-year Federal bonds (€1½ billion). By contrast, the German Federal government redeemed ten-year bonds and Federal Treasury discount paper (Bubills) totalling €12 billion and €5½ billion net respectively. On balance, the German Länder tapped the capital market in the amount of €4½ billion in the quarter under review.

On balance, only issues by non-financial corporations

Domestic enterprises issued debt securities worth €½ billion net in Germany in the period under review. On balance, these were

4 A contributory factor here were securities purchased by the Deutsche Bundesbank from foreign counterparties under the SMP.

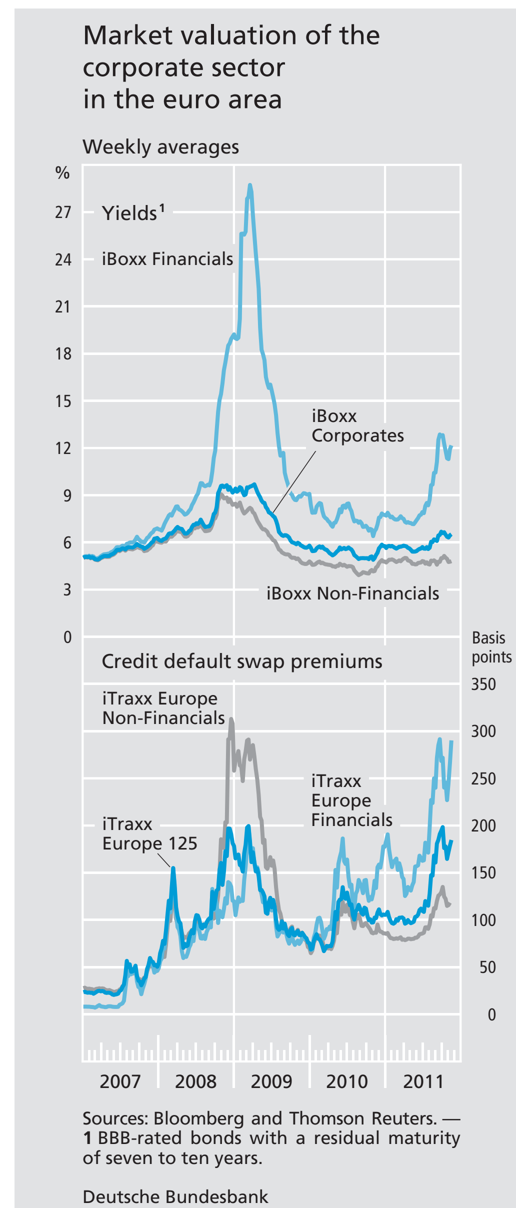
solely bonds running less than one year. Whereas non-financial corporations, in the light of virtually unchanged yields, increased their market debt by just under €7 billion overall, non-monetary financial intermediaries redeemed bonds for roughly the same amount.

Net redemptions by credit institutions

Domestic credit institutions reduced their capital market debt by €4 billion net in the third quarter, compared with €36½ billion in the previous three-month period. This takes into consideration the fact that they scaled back holdings of their own bonds by €3 billion; credit institutions' capital market debt would have dropped even further without this adjustment. On balance, they redeemed primarily public Pfandbriefe (€13 billion) and mortgage Pfandbriefe (€5½ billion). Specialised credit institutions, meanwhile, issued debt securities to the tune of €16 billion net.

Purchase of debt securities

In the third quarter, the Bundesbank and domestic non-banks were the main buyers of debt securities, adding paper worth €21½ billion and €8 billion respectively to their portfolios; primarily foreign securities were bought (€20½ billion in total). The Bundesbank mainly bought securities under the SMP, after the Eurosystem had resumed its purchases at the beginning of August. Given the high level of uncertainty in Europe, foreign investors acquired German debt securities worth €18½ billion. They largely invested in public sector bonds, which are usually in strong demand in times of crisis because of the high degree of security and liquidity these instruments offer. By contrast, German credit institutions disposed of interest-bearing paper in the amount of €34 billion net; they sold foreign debt instruments totalling €18½ billion. As was mentioned above, the Bundesbank took over, in net terms, a portion of the debt securities disposed of by domestic banks.



Sources: Bloomberg and Thomson Reuters. — **1** BBB-rated bonds with a residual maturity of seven to ten years.

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In the third quarter, too, price movements on the international stock markets were largely driven by the high level of investor uncer-

Investment activity in the German securities markets

€ billion

Item	2010 Q3	2011 Q2	2011 Q3
Debt securities			
Residents	– 34.0	– 51.2	– 4.2
Credit institutions	– 31.9	– 17.5	– 33.9
of which			
Foreign debt securities	– 10.9	– 2.6	– 18.3
Other sectors	– 2.0	– 33.7	29.7
of which			
Domestic debt securities	– 32.9	– 41.9	9.3
Non-residents	30.6	58.9	18.7
Shares			
Residents	– 9.2	15.8	– 8.4
Credit institutions	– 3.1	– 0.3	– 12.0
of which			
Domestic shares	– 1.4	– 5.1	– 7.1
Other sectors	– 6.1	16.1	3.6
of which			
Domestic shares	0.4	10.3	12.1
Non-residents	2.1	12.6	– 4.7
Mutual fund shares			
Investment in specialised funds	20.2	4.2	5.6
Investment in funds open to the general public	3.0	0.5	0.2
of which Share-based funds	0.3	1.4	0.7

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Prices fall sharply on the international stock markets amid high volatility

tainty due to the sovereign debt crisis in Europe. Moreover, there was a renewed increase in recessionary fears on both sides of the Atlantic. This combination of factors led to considerable share price losses, which were accompanied by strong fluctuations. Stock price indices fell to a low in the second half of September. This was followed by some easing of tensions as a result of economic data which were, in part, somewhat better than anticipated and the expectation that a solution to the European sovereign debt crisis would be found at the EU summit at the end of October. By contrast, the reporting season for US and European enterprises, which was fairly favourable of late, did not touch off any strong positive stimuli: enterprises' earnings prospects, which are of greater relevance to equity valuation than earnings generated in the past, became increasingly clouded.

After the outcome of the summit at the end of October was announced, the stock markets as a whole, and banking stocks in several peripheral countries in particular, registered pronounced price gains. However, these gains were quickly lost again when the Greek government announced a referendum, causing doubts among market participants about whether Greece would actually meet the conditions linked to the rescue package, and the EU and the IMF put a temporary halt on further payments under the Greek aid programme. As measured by the implied volatility of equity options, share price uncertainty rose again substantially, particularly in Europe. Nevertheless, volatility in November stayed below the levels recorded one month before.

On balance, price losses on German and European equities, measured against the broad-based CDAX and Euro Stoxx indices, amounted to 20½% and 21½% respectively from the end of June. Japanese shares (Nikkei, -13½%) and US shares (S&P 500, -8%) lost less by comparison. European bank equities suffered even heavier losses than the market as a whole (-35% since the end of June); this was true, above all, of the bank indexes in Greece, Portugal and Italy. Not least of all, this was the result of banks' large exposure to sovereign debt in peripheral countries.

The risk premium which investors demand for an investment in European shares (Euro

Equity risk premium almost unchanged

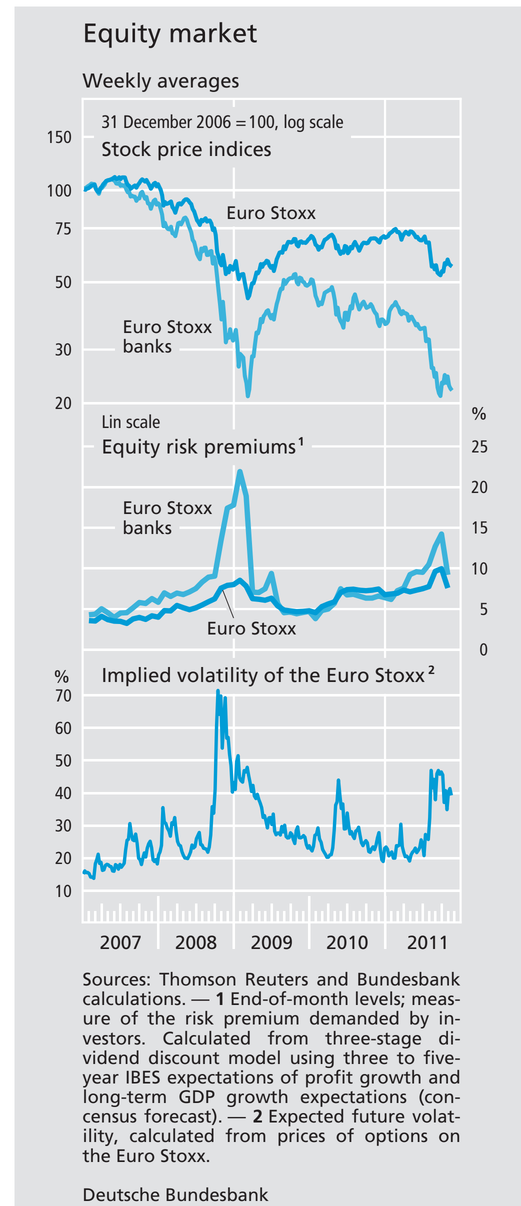
Stoxx) as compared to a safe investment, and which can be calculated using a dividend discount model, at first rose considerably in the reporting period before receding to 7½% in October; this was roughly in line with the level at mid-year. It therefore remains considerably above the five-year average (around 5½%). The implied risk premium for exposure to European banking stocks is also, on balance, roughly at its prior-quarter level. This means that, compared to the market as a whole, investors can continue to demand roughly 1½ percentage points more as compensation for investing in banking stocks.

Low level of stock market funding

Issuing activity in the German equity market was subdued in the third quarter. Domestic enterprises issued only €½ billion worth of new shares, the majority of which were unlisted equities. In the same period, the outstanding volume of foreign equities in the German market dropped by €13½ billion. Equities were purchased only by domestic non-banks (€3½ billion), which bought only domestic paper in net terms. By contrast, resident credit institutions sold shares worth €12 billion, with domestic paper again accounting for the lion's share. Foreign investors sold German equities to the tune of €4½ billion.

Sales and purchases of mutual fund shares

During the reporting period, domestic investment companies recorded inflows of €6 billion, after raising funds totalling €4½ billion in the previous three months. Almost all the fresh funds benefited specialised funds reserved for institutional investors (€5½ billion). Of the mutual funds open to the general public, bond funds, equity funds and money market funds in particular sold new shares



Sources: Thomson Reuters and Bundesbank calculations. — 1 End-of-month levels; measure of the risk premium demanded by investors. Calculated from three-stage dividend discount model using three to five-year IBES expectations of profit growth and long-term GDP growth expectations (consensus forecast). — 2 Expected future volatility, calculated from prices of options on the Euro Stoxx.

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totalling €½ billion in each case. By contrast, mixed securities-based funds and mixed funds repurchased shares worth €1 billion and €½ billion respectively. Foreign funds active in the German market recorded outflows totalling €3½ billion. Foreign investors were the sole net purchasers, adding mutual fund shares in the value of €4 billion to their portfolios. On the other hand, domestic credit institutions sold fund shares in the amount of

Major items of the balance of payments

€ billion

Item	2010 Q3	2011 Q2	2011 Q3
I Current account [1,2]	+ 30.8	+ 27.2	+ 30.0
Foreign trade [1,3]	r + 38.9	r + 38.3	+ 39.8
Services [1]	– 7.1	– 2.4	– 6.6
Income [1]	+ 12.9	+ 0.7	+ 13.4
Current transfers [1]	– 10.9	– 5.6	– 10.3
II Capital transfers [1,4]	+ 0.0	– 0.3	+ 0.1
III Financial account [1] (Net capital exports: –)	– 25.7	– 29.2	– 17.6
1 Direct investment	+ 15.5	+ 3.7	+ 2.2
German investment abroad	+ 7.5	+ 0.9	– 5.6
Foreign investment in Germany	+ 7.9	+ 2.8	+ 7.8
2 Portfolio investment	+ 7.1	+ 55.2	+ 31.2
German investment abroad	– 24.9	– 16.3	+ 12.8
Shares	+ 2.8	– 8.4	+ 11.4
Mutual fund shares	– 7.7	– 2.3	+ 3.6
Debt securities	– 20.0	– 5.6	– 2.2
Bonds and notes [5]	– 17.2	+ 2.5	+ 2.2
of which Euro-denominated bonds and notes	– 12.0	+ 5.6	+ 3.3
Money market instruments	– 2.7	– 8.1	– 4.3
Foreign investment in Germany	+ 32.0	+ 71.5	+ 18.4
Shares	+ 2.0	+ 11.7	– 4.2
Mutual fund shares	– 0.5	+ 0.9	+ 3.9
Debt securities	+ 30.6	+ 58.9	+ 18.7
Bonds and notes [5]	+ 21.5	+ 37.6	+ 4.7
of which Public bonds and notes	+ 23.6	+ 30.7	+ 9.0
Money market instruments	+ 9.0	+ 21.3	+ 14.0
3 Financial derivatives [6]	– 7.9	– 5.3	– 6.8
4 Other investment [7]	– 40.8	– 82.3	– 43.7
Monetary financial institutions [8]	+ 42.4	– 52.4	+ 56.2
of which short-term	+ 15.5	– 47.6	+ 66.6
Enterprises and households	– 25.7	– 6.6	– 8.0
of which short-term	– 9.9	+ 0.8	– 7.3
General government	+ 3.3	– 7.2	+ 18.1
of which short-term	+ 2.5	– 8.6	+ 15.4
Bundesbank	– 60.7	– 16.2	– 110.0
5 Change in reserve assets at transaction values (increase: –) [9]	+ 0.3	– 0.4	– 0.6
IV Errors and omissions	– 5.1	+ 2.3	– 12.4

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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€1½ billion. Buyers included almost no domestic non-banks on balance in the period under review.

Direct investment

Inflows in direct investment

As in cross-border portfolio transactions (€31 billion), Germany also recorded net inflows in direct investment between July and September (€2 billion). This mainly resulted from direct investment by foreign enterprises in Germany (€8 billion, after €3 billion in the previous quarter), which provided their German affiliates with additional funds, particularly through intra-group loans (€4½ billion), as well as in the form of equity capital and reinvested earnings (together €3½ billion). The main investors were enterprises from European countries (€5½ billion), with those primarily from the euro area and Switzerland investing more heavily in Germany. German private equity firms received a large portion of funds (€7 billion), while €2 billion flowed to domestic credit institutions.

Domestic owners, too, provided their foreign subsidiaries with capital in the third quarter (€5½ billion). In particular, they (re)invested earnings previously generated abroad (€8½ billion). Furthermore, they increased their equity capital abroad. Conversely, resident parent enterprises recorded an inflow of funds via intra-group credit transactions (€5 billion) which – in line with the standard international methods for compiling the balance of payments – have to be offset. Borrowing from foreign subsidiaries played an important role in this context. Emerging market and devel-

oping countries were the geographical focus of German direct investment abroad in the third quarter, whereas capital was withdrawn in net terms from the US in particular.