# Financial markets

## Financial market setting

*Financial markets affected by continued low interest rates*

In the fourth quarter of 2013, the international financial markets were propelled by brighter prospects for the US economy, prospects which at the end of December prompted the US Federal Reserve (Fed) to decide to progressively downsize its programme of quantitative easing. Economic recovery in the euro area also gathered a little more pace. Against this backdrop, bond yields in the largest economies picked up significantly towards the end of the year, and there were further price gains on the equity markets. Bank stocks recorded above-average increases, benefiting, in Europe in particular, from an easing of tensions on the government bond markets in the periphery countries.

At the beginning of this year, there was renewed uncertainty at times on the global financial markets. This was triggered by developments in a number of emerging market economies, where share prices and exchange rates came under pressure – considerable in some instances – as international investors withdrew funds. In the industrial countries, the growing risk aversion caused a decline in equity prices and a flight into safe haven liquid government bonds. On the foreign exchange markets, the yen in particular appreciated in the new year. Compared with the beginning of the fourth quarter of 2013, the value of the euro as a weighted average against the currencies of 20 large trading partners was slightly higher on balance.

## Exchange rates

In the autumn of last year, the foreign exchange markets were focused less on emerging economy currencies than on how the euro was performing against the US dollar. At the beginning of November, the single currency fell to a rate of just under US$1.34 after the ECB Governing Council decided to make a key interest rate cut, a move which had already been the subject of speculation in the period leading up to it after a surprisingly low inflation figure for the euro area. Statements by several members of the US central bank's Federal Open Market Committee suggesting an imminent start to the scaling back of ongoing asset purchases put additional pressure on the euro. The effect these statements had on the foreign exchange markets was further augmented by the announcement of unexpectedly strong third-quarter economic growth in the United States and very favourable US labour market data.

*Euro depreciated against the US dollar in connection with the ECB Governing Council's interest rate cut at the beginning of November*

In subsequent weeks, however, the euro gradually recovered, thanks to new doubts on the market regarding forthcoming monetary policy measures in the United States. This was partly in response to below-forecast inflation in the United States and higher-than-anticipated inflation in the euro area. Moreover, the ECB Governing Council decided not to loosen monetary policy further, against the expectations of some market participants. In mid-December, however, the euro's rise came to a halt when the government and opposition in the United States were able to agree on a budget act and the US central bank finally announced its first step in tapering its asset purchases.

*Subsequent recovery in the euro came to a halt after the US central bank's decision to taper its asset purchases*

In the period of thin trading just before the end of 2013, the euro rose to an all-year high of over US$1.38 for a short time. However, in January 2014 it declined in the face of firmer market expectations of ongoing tapering in the Fed's asset purchases. The direction of movement was nonetheless temporarily interrupted on several occasions, when weak US labour market figures were announced, a US purchasing managers' index produced a disappointing number, and the ECB Governing Council left policy unchanged at the beginning of February. Most recently, the single currency was 1½%

*The euro has appreciated against the US dollar on balance*

stronger than at the beginning of the final quarter of 2013, at US$1.37.

*Euro appreciates considerably against the yen …*

The euro gained in value considerably against the yen from mid-November onwards. This was when it became known that the growth of the Japanese economy in the third quarter was much lower than it had previously been. The Japanese finance minister also mooted the possibility of intervening in the currency markets to weaken the yen. The value of the yen fell further in December as a result of: a political conflict between China and Japan; a growing Japanese trade deficit which then also drove the current account into negative territory; expectations that the Japanese central bank might in the medium term further loosen what was already a very expansionary monetary policy; and a marked downward revision in the abovementioned gross domestic product (GDP) growth figure. As a consequence, the euro reached a year high of ¥145 in the final days of December. However, in January 2014 investors increasingly withdrew funds from a number of emerging market economies. The associated portfolio shifts were of obvious benefit to the Japanese currency in particular, which meant that the euro surrendered some of its gains against the yen. Nonetheless, at the end of the period under review the euro stood at ¥139, which was 6% higher than at the beginning of the fourth quarter of 2013.

*… but depreciates against the pound sterling*

Since the beginning of November, the euro has progressively lost value against the pound sterling. The main factor in this has been the surprisingly robust economic recovery in the United Kingdom in recent months. As the British labour market has also benefited noticeably from this recovery, market participants have been speculating on the possibility of the Bank of England tightening monetary policy in the near future. The central bank previously promised not to raise its key interest rates until the British unemployment rate fell to 7%, but has now distanced itself from this approach. Most recently, the euro stood at £0.82, which was 1½% weaker than at the end of the third quarter of 2013.

**Exchange rate of the euro**

Daily data; log scale

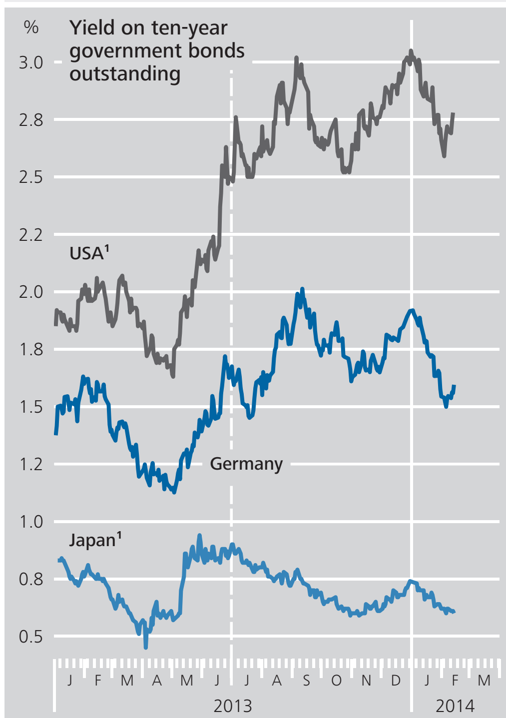
Source: ECB. **1** Exchange rate at the start of monetary union on 4 January 1999. **2** As calculated by the ECB against the currencies of 20 countries.
Deutsche Bundesbank

*A moderate rise in the effective euro rate*

Because Latvia joined the euro area at the beginning of 2014, the effective euro exchange rate is now calculated as a weighted average against 20 countries. From the beginning of the fourth quarter of 2013 until the end of the period under review, the effective euro rate strengthened 1% against this basket of currencies. In the new year, as a consequence of the turbulence on financial markets in the emerging economies, the euro also appreciated, sometimes markedly, against a number of currencies which are mostly not included in the

**Bond yields in Germany, Japan and the USA**

Daily data




**1** Source: Thomson Reuters.
Deutsche Bundesbank

basket, such as the forint, the rouble, the rand and the Turkish lira.

## Securities markets and portfolio transactions

*Sharp price fluctuations on the international bond markets*

At the beginning of the period under review, initially mixed indicators for the global economy and the United States made for uncertainty on the international bond markets, with yields on government bonds trending downwards until the end of October. Rates only rose slightly for a time in response to the government shutdown in the United States at the beginning of October. However, firmer indicators for US economic prospects published in the course of November – increasingly deemed to betoken a forthcoming reduction in Fed asset purchases – prompted significant upward movement overall in US Treasury yields at the end of the year. In January, pursuant to its decision-making, the Fed reduced its purchases of long-term government bonds and of agency mortgage-backed securities by US$5 billion each, so that total asset purchases were cut to US$75 billion. At the end of January, the US central bank decided to reduce its purchases in February by a further US$5 billion per asset class. At the same time, it also vouchsafed not to raise its key interest rate from its current level even if the unemployment rate were to fall below the previously communicated threshold of 6.5%.

*Beginning of asset purchase tapering in the United States*

*Turbulence in emerging markets puts pressure on yields for a time*

As a result of improved economic prospects and with the expectation of reduced support measures, the yields on ten-year US Treasuries climbed to over 3.1% up to the end of last year, before turning downwards again at the beginning of this year, a trajectory which held until the end of January. Against the backdrop of turbulence on the financial markets in some emerging economies, investors were increasingly looking to bonds they deemed safe. As a net result, yields on US government bonds were most recently somewhat higher than at the end of September, at 2.8%.

*Yields in Japan continue to decline*

Japanese government bonds moved up and down in similar fashion; in the fourth quarter they were less clearly detached from yield movements in other countries than had previously been the case. Compared to the end of September, yields on ten-year Japanese government bonds were nine basis points lower; latterly they reached a level of 0.6%. In the recent period, domestic economic stimulus has given support to yields, whilst capital inflows from abroad have tended to push yields down.

*Yields in core euro-area countries falling since the new year*

As yields are closely connected with those in the United States, the movement in yields on long-term US government bonds was to a large extent transmitted to government bond yields in Germany and the other core euro-area countries. The yield on ten-year Bunds rose to 1.9% in the fourth quarter of 2013. The reduction in yields at the beginning of this year pushed the Bund yield down to 1.6% most recently; this constitutes a drop of 13 basis points compared

to the end of September. On balance, US yields are now 116 basis points above German yields, a differential which has widened by 25 basis points and is comparable to the level it was at in mid-2013.

*German yield curve remains steep*

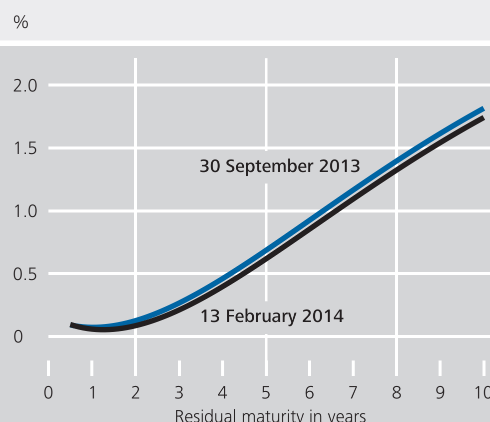
Despite the fall in yields at the longer end, which, in comparison to the end of September, has slightly flattened the German yield curve covering Federal bonds with maturities of two to ten years, the curve remains very steep. This means that market participants expect higher short-term interest rates within this period. Thus, when regarded in this light, the cut in key interest rates in the euro area at the beginning of November, though it affected the money market, had little impact on longer-term interest rate expectations (see chart opposite). Since the end of September, implied inflation expectations (ie the break-even inflation rates) for paper with a ten-year maturity, which are derived from the spread between nominal and real yields on Federal bonds, have fallen by 28 basis points to a level of 1.2%. The corresponding five-year forward break-even inflation rate five years ahead has dropped 16 basis points and is now at 1.3%.

*Positive market sentiment for the euro-area periphery*

Since the end of September, the GDP-weighted yield on long-term bonds issued by euro-area countries (not including Germany) has experienced a much sharper fall (of 51 basis points to 3.0%) than the yield on German Federal bonds. This is primarily the result of yield movements in the periphery countries, where macroeconomic trends gained further solidity in the fourth quarter of 2013. In the context of the ongoing search for yield in a low-interest-rate environment, economic stabilisation was accompanied by some significantly narrower risk premiums, which is reflected *inter alia* in smaller yield spreads against Germany. The fall in associated credit default swap spreads provides further corroboration (see chart on page 52). The first periphery countries – Ireland and Spain – have also now exited their financial assistance programmes. Furthermore, with the market environment more stable, Ireland, Portugal and

**Yield curve on the German bond market***

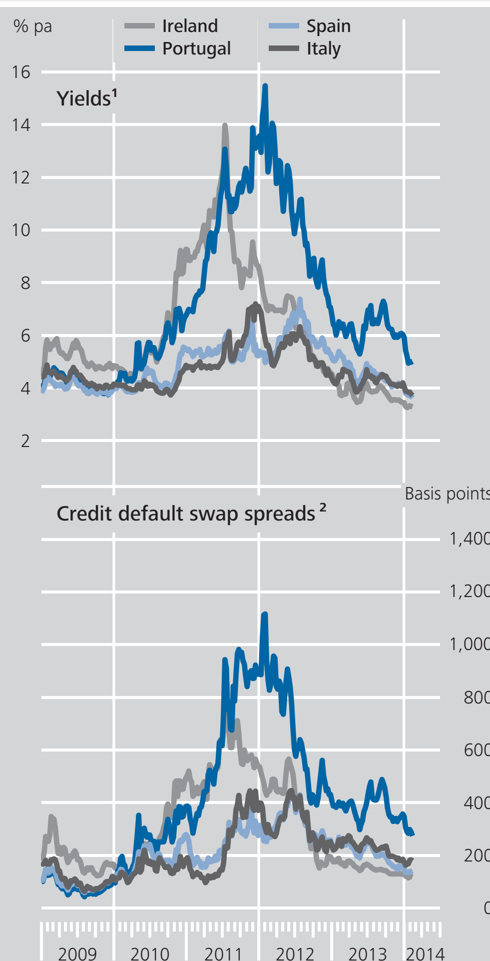
%




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

**Financing conditions for selected euro-area countries**

Weekly averages




1 Government bonds with a residual maturity of ten years. Source: Thomson Reuters. 2 Spreads on ten-year credit default swap (CDS) contracts on the basis of government bonds with matching maturities. Source: Markit.
Deutsche Bundesbank

**Investment activity in the German securities markets**

€ billion

| Item | 2012 Q4 | 2013 Q3 | 2013 Q4 |
|---|---|---|---|
| **Debt securities** | | | |
| Residents | − 26.2 | − 11.6 | 5.8 |
| Credit institutions | − 17.3 | − 7.7 | − 0.6 |
| *of which* | | | |
| Foreign debt securities | 0.3 | − 0.1 | 2.3 |
| Deutsche Bundesbank | − 2.4 | − 2.7 | − 2.1 |
| Other sectors | − 6.5 | − 1.1 | 8.5 |
| *of which* | | | |
| Domestic debt securities | − 27.6 | − 20.8 | − 9.1 |
| Non-residents | 11.9 | − 11.5 | − 18.8 |
| **Shares** | | | |
| Residents | 20.2 | 6.1 | − 7.0 |
| Credit institutions | 8.2 | 6.9 | − 2.2 |
| *of which* | | | |
| Domestic shares | 0.4 | 3.2 | − 1.9 |
| Non-banks | 11.9 | − 0.7 | − 4.8 |
| *of which* | | | |
| Domestic shares | 0.6 | − 6.5 | − 1.4 |
| Non-residents | − 0.3 | 3.8 | 4.7 |
| **Mutual fund shares** | | | |
| Investment in specialised funds | 29.4 | 15.6 | 29.1 |
| Investment in retail funds | 3.0 | 3.2 | − 0.5 |
| *of which* | | | |
| Equity funds | 0.7 | 0.6 | 1.2 |

Deutsche Bundesbank

Spain issued bonds on the capital market in January which met with solid demand. Ireland benefited in this respect from regaining investment grade status as a result of an upgrade from a major credit rating agency. Yields on ten-year Irish and Spanish government bonds have been at their lowest level since 2006 for periods, trading at 3.3% and 3.7% respectively. Yields on Greek, Italian and Portuguese bonds with the same maturity have been more or less at their mid-2010 levels at times. As a result, the yield dispersion amongst long-term government bonds in the euro area has fallen to its lowest level since mid-2010. Clearly, the markets are very much rewarding the progress individual countries have made in their adjustment programmes, progress which is also reflected in improved overall economic prospects, and the markets expect this progress to continue.[1] Against this background, lower financing costs are not a reason to relax reform efforts. Market participants, for their part, will have to take care that yields on the bond markets move in line with the specific risks.

*Further improvement in financing conditions for enterprises*

Financial enterprises in Europe have also benefited from the favourable market environment, with a slight improvement in financing conditions on the corporate bond market. The yields on their bonds with a residual maturity of seven to ten years and a BBB rating fell 77 basis points over the period under review to 4.1% most recently.[2] These yields have now fallen to a level lower than before the outbreak of the financial crisis. Yields on bonds with the same maturities and ratings issued by European nonfinancial enterprises have also declined in comparison to the end of September 2013. As a result, these bonds were most recently trading at 2.9%, as against 3.2% at the beginning of the period under review, putting them well below the yields they were paying before the onset of the financial crisis in mid-2008. Consequently, yield spreads against German Federal bonds with the same maturity have narrowed by 64 basis points to 252 basis points in the case of financial corporations, and by 20 basis points to 130 basis points in the case of nonfinancial corporations. This change is in keeping with falling credit default swap spreads (iTraxx) and liquidity premiums, and may be seen against the backdrop of a pronounced search for yield in a global low-interest-rate environment.

*Bond market issuance*

Gross issuance on the German bond market in the fourth quarter of 2013 was well down on the previous quarter. Overall, German borrowers issued paper worth €366 billion, compared with €380½ billion in the previous three months. Taking account of redemptions and changes in issuers' holdings of their own bonds, domestic issuers once again reduced their capital market borrowing, following net redemptions in the previous quarter (-€30 bil-

**1** See also Deutsche Bundesbank, Adjustment processes in the member states of economic and monetary union, Monthly Report, January 2014, pp 13-78.
**2** Based on corporate bond yields included in the various iBoxx bond indices for different rating grades.

lion). In the fourth quarter, foreign debt instruments totalling €17 billion were sold on the German bond market. On balance, the total outstanding volume of bonds in Germany thus shrank by €13 billion in the quarter under review.

*Net public sector issuance*

The public sector issued debt instruments totalling €9 billion net in the quarter under review. The Federal government mainly issued 10-year and 30-year bonds (for €12 billion and €1½ billion respectively). This contrasted with net redemptions of Treasury discount paper in the amount of €4½ billion and five-year Federal notes worth €2 billion. The Federal states borrowed €2 billion net from the bond market.

*Net issuance of bonds by non-financial corporations*

At the same time, non-financial corporations, which typically have a high level of internal financing, increased their capital market debt by €1 billion in net terms. On balance, paper with maturities of less than one year was redeemed, while more longer-dated securities were issued. Financial firms, on the other hand, cut back their outstanding bonds by €1½ billion net.

*Reduction in credit institutions' capital market debt*

In their end-of-year treasury operations, German credit institutions on the whole took further steps to slim their total assets. In this context, they also reduced their capital market debt, cutting €38½ billion off the total in the final quarter of 2013. "Other bank debt securities", which can be structured flexibly, as well as debt securities issued by specialised credit institutions, were the main focus of redemptions (€20 billion and €11 billion respectively), whilst public Pfandbriefe (€6½ billion) and mortgage Pfandbriefe (€1 billion) were also redeemed to a lesser extent.

*Debt securities bought only by German non-banks*

In the fourth quarter of 2013, debt securities were bought exclusively by German non-banks, which added €8½ billion worth of bonds to their portfolios in net terms. In contrast, fixed-income securities were divested by foreign investors in particular (€19 billion), as well as by the Bundesbank (€2 billion) and German credit institutions (€½ billion).

**Share valuations of European and US enterprises and long-term real interest rates for Germany and the United States**

Monthly data

Sources: IBES Global Aggregates (Thomson Reuters), Consensus Economics and Bundesbank calculations. **1** Yields on ten-year government bonds minus ten-year inflation expectations from surveys (Consensus Forecast).
Deutsche Bundesbank

*Equity markets driven by brighter economic picture*

In the fourth quarter of 2013, share prices in the major international financial centres continued on the upward trend they had pursued in previous months. As well as the ongoing low-interest-rate environment, the main driver of this trend was the brighter economic outlook on both sides of the Atlantic. Subsequently, however, the market turbulence observed in some emerging markets in the second half of January caused shares in the key financial centres to slide temporarily, too, which was coupled with heightened equity market volatility.[3] As measured by the broad Euro Stoxx and S&P 500 indices, European and US shares were nonetheless most recently 8.3% and 8.8% higher respectively than at the end of Septem-

**3** Despite the temporary rise, uncertainty about future prices on both sides of the Atlantic was recently still below its five-year average values.

## Major items of the balance of payments

€ billion

| Item | 2012 Q4 | 2013 Q3 | 2013 Q4 |
|---|---|---|---|
| I Current account[1, 2] | + 53.8 | + 44.4 | + 65.6 |
| Foreign trade[1, 3] | + 44.8 | + 49.8 | + 51.2 |
| Services[1] | + 2.0 | − 6.0 | + 5.7 |
| Income[1] | + 20.1 | + 18.4 | + 22.1 |
| Current transfers[1] | − 5.9 | − 10.3 | − 5.3 |
| II Capital transfers[1, 4] | − 0.6 | + 0.1 | + 1.0 |
| III Financial account[1] (Net capital exports: –) | − 79.8 | − 66.7 | − 72.7 |
| 1 Direct investment | − 1.4 | − 3.4 | + 10.7 |
| German investment abroad | − 4.5 | − 7.9 | − 8.9 |
| Foreign investment in Germany | + 3.1 | + 4.4 | + 19.6 |
| 2 Portfolio investment | − 33.5 | − 39.4 | − 31.3 |
| German investment abroad | − 45.8 | − 33.0 | − 22.0 |
| Shares | − 13.3 | − 8.8 | + 3.2 |
| Mutual fund shares | − 12.6 | − 7.7 | − 8.2 |
| Debt securities | − 20.0 | − 16.5 | − 16.9 |
| Bonds and notes[5] | − 23.8 | − 16.4 | − 16.5 |
| *of which* Euro-denominated bonds and notes | − 16.6 | − 7.5 | − 11.1 |
| Money market instruments | + 3.7 | − 0.1 | − 0.5 |
| Foreign investment in Germany | + 12.4 | − 6.5 | − 9.3 |
| Shares | − 0.2 | + 3.9 | + 3.9 |
| Mutual fund shares | + 0.6 | + 1.2 | + 5.6 |
| Debt securities | + 11.9 | − 11.5 | − 18.8 |
| Bonds and notes[5] | + 11.0 | − 5.1 | + 11.8 |
| *of which* Public bonds and notes | + 14.2 | + 4.3 | + 16.1 |
| Money market instruments | + 1.0 | − 6.5 | − 30.6 |
| 3 Financial derivatives[6] | − 4.2 | − 2.1 | − 6.3 |
| 4 Other investment[7] | − 41.2 | − 22.6 | − 44.3 |
| Monetary financial institutions[8] | − 70.0 | − 15.5 | − 64.0 |
| *of which* short-term | − 79.5 | − 25.9 | − 74.7 |
| Enterprises and households | + 11.3 | + 3.0 | − 22.2 |
| *of which* short-term | + 12.1 | + 8.9 | − 13.3 |
| General government | − 32.7 | − 12.1 | − 9.6 |
| *of which* short-term | − 15.1 | − 10.4 | − 6.3 |
| Bundesbank | + 50.2 | + 2.0 | + 51.4 |
| 5 Change in reserve assets at transaction values (increase: –)[9] | + 0.5 | + 0.8 | − 1.5 |
| IV Errors and omissions | + 26.6 | + 22.3 | + 6.1 |

**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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ber. The CDAX share price index has gained 11.4%. Banks have recorded a particularly steep rise in their share prices, with European and US bank stocks gaining 21.1% and 11.2% respectively since the end of September. Equities in the euro-area periphery countries have also benefited from the end of recessionary conditions. In the period under review, they recorded above-average price gains.

*Particularly sharp share price increases for European banks*

Despite the recent price setback, equity valuations remain comparatively high on both sides of the Atlantic. For instance, the price/earnings ratio, based on 12-month earnings growth expectations, was most recently above its level at the end of September, at 13.0 for the Euro Stoxx and 14.5 for the S&P 500. At the same time, and in keeping with the brighter economic picture, dividend payments made by Euro Stoxx companies as well as medium-term expectations of earnings growth have increased since the end of September. Applying dividend discount models to the data produces a relatively high implied risk premium (8.0% at present for the Euro Stoxx index). This reflects a degree of caution in investors' attitude to equity exposures. However, it needs to be borne in mind that the long-term real interest rates used in the calculations, derived from ten-year Federal bonds and inflation expectations from surveys (Consensus Forecast), have declined overall, and are currently slightly negative. A comparison with the mid-2007 pre-crisis level also shows that it is mainly the pronounced drop in real interest rates which has driven the estimated risk premium upwards.

*Share price setbacks in emerging market economies*

The share price setbacks in the emerging markets were significantly more marked than in industrial countries; the impact on the stock markets of capital outflows prompted by Fed tapering was compounded in a number of countries by internal macroeconomic weaknesses, such as current account and budget deficits, stability issues or relatively weak economic growth, as well as political tension in some nations. Measured by the MSCI Emerging

Markets Index, the markets have fallen by 4.2% since the end of September.

*Low level of stock market funding*

Notwithstanding the positive overall movement in share prices, issuance on the German stock market remained comparatively modest in the fourth quarter of 2013. Fundraising by German enterprises totalled €1½ billion in net terms in the quarter under review. The volume of foreign shares on the German market shrank by €3½ billion in the same period. On balance, shares were bought only by foreign investors, who purchased a net €4½ billion. German non-banks and domestic credit institutions reduced their equity exposure by €5 billion and €2 billion respectively.

*Sales and purchases of mutual fund shares*

In the final quarter of 2013, domestic investment companies recorded a net inflow of €28½ billion, compared with €19 billion in the previous quarter. On balance, the inflows were channelled exclusively to specialised funds reserved for institutional investors (€29 billion). Of the various asset classes, bond funds, in particular, registered net inflows of capital (€10 billion), as did, albeit to a lesser extent, mixed security-based funds and mixed funds (€5½ billion each) as well as equity funds and open-end real estate funds (€3 billion each). The outstanding volume of foreign mutual fund shares in Germany rose by €8 billion in the period under review. Mutual fund shares were bought almost exclusively by domestic non-banks, which added €31 billion worth of fund shares to their portfolios. For the most part, this related to domestic mutual funds. Non-resident investors and domestic credit institutions acquired mutual fund shares worth €5½ billion and €½ billion respectively.

## Direct investment

*Capital imports in direct investment*

Unlike in cross-border portfolio transactions, which recorded a net outflow of funds totalling €31½ billion, net capital imports amounting to €10½ billion were registered in the form of direct investment in the fourth quarter of 2013.

*Foreign direct investment in Germany*

The main contributor was the comparatively large volume of funds furnished by foreign investors to their subsidiaries in Germany. These totalled €19½ billion in the final quarter, and predominantly took the form of intra-group financial loans (€14 billion). In addition, non-resident proprietors provided equity capital amounting to €5 billion. The main countries of origin were Luxembourg (€7 billion), Spain (€3 billion) and the United Kingdom (€2½ billion).

*German direct investment abroad*

German enterprises also increased their direct investment abroad in the fourth quarter (by €9 billion). Although direct equity stakes were reduced by €2½ billion on balance, investment abroad expanded through the reinvestment of earnings at direct investment enterprises and through intra-group credit transactions (€6 billion in each case). Credit transactions between affiliated enterprises in the period under review mainly consisted of loan repayments made by German proprietors to foreign affiliates. Transactions with financing subsidiaries in Luxembourg and the Netherlands featured prominently in this.