Financial markets

Financial market setting

Financial markets strongly influenced by monetary policy

Developments in the international financial markets during the second quarter of 2015 were strongly influenced by the central banks. In March 2015, the Eurosystem began implementing the ECB Governing Council's decision of mid-January to launch an extended asset purchase programme entailing the monthly acquisition of public and private sector securities on the secondary market totalling, on average, €60 billion in value each time. As a result, interest rates in euro-area bond markets initially fell, in some cases, to record lows. Added to this, yields on US government bonds also declined for a while due to a string of unexpectedly negative economic data. However, sentiment in the bond markets rebounded at the end of April. Investors around the world came to the conclusion that yields had dropped to an unsustainably low level, triggering a sizeable countermovement. The euro, too, temporarily chalked up marked gains in the forex markets against the US dollar, pound sterling and yen. Thereafter, the financial markets were for a time influenced by the heightened uncertainty surrounding the course of negotiations between the Greek government and its creditors as well as stock market developments in China, where there was a dramatic fall in equity prices. In mid-August, there were also movements in the markets as a result of the Chinese central bank's decision to change the mechanism used to set the reference rate of the renminbi against the US dollar. This triggered a major depreciation of the renminbi in the days following the decision. Against this backdrop, market participants considered it less likely that the US Federal Open Market Committee would announce an early initial rise in interest rates – despite growth momentum in the United States once again being appraised more positively than before. On balance, yields on both sides of the Atlantic rose over the reporting period. Stock markets in the United States and, above all, in Japan posted price gains at the end of the second quarter despite rising bond yields and intermittent heightened uncertainty, whereas share prices in the euro area were down compared with the end of the first quarter. Overall, the euro gained considerable ground in nominal effective terms, primarily on the back of the aforementioned depreciation of the renminbi.

Exchange rates

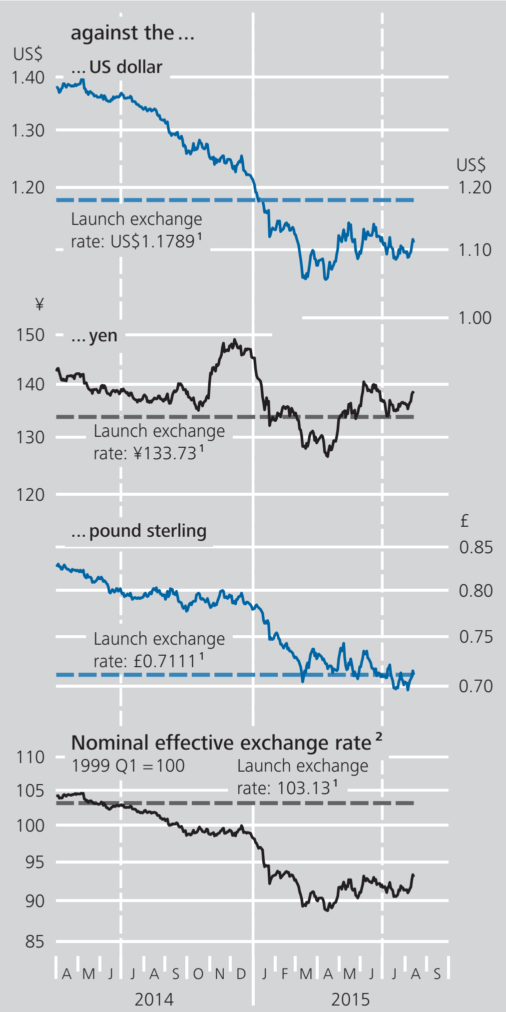
Euro rises on balance against the US dollar …

The euro initially fell to a rate of US$1.06 by mid-April, based on market participants' assumption that there might be a speedier rise in the key interest rate in the USA following the publication of the minutes of the Federal Open Market Committee at the beginning of April. However, the euro soon managed to stabilise, appreciating by 8 cents by mid-May to stand at US$1.14. This was brought about, on the one hand, by a series of weaker than expected business statistics across the Atlantic and, on the other, by more favourable economic data in the euro area, which caused euro-area bond returns to increase sharply. For a while, the euro was subdued by the news that the Eurosystem was going to bring forward some of the bond purchases planned for the summer. However, by June 2016 it was once again trading at US$1.14.

Nevertheless, as of the second half of June, the gains made by the euro began to erode, partly on account of a series of unexpectedly good economic data in the United States, in the wake of which market participants once again considered an interest rate hike by the Fed to be more likely. In addition, the interest rate advantage of US investments vis-à-vis euro-area investments weighed on the euro. Overall, the mixed news circulating on the state of negotiations between creditor states and the Greek government had only modestly impacted on the foreign exchange market over the reporting period. As this report went to press, the

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 19 countries.
Deutsche Bundesbank

euro stood at US$1.11, somewhat up on its level at the end of March 2015.

... and the yen ...

The higher bond yields also boosted the euro's strength in relation to the yen into the first half of June. Furthermore, the euro benefited from the improved economic outlook in the euro area, as opposed to Japan where the central bank revised its inflation and growth forecast downwards. Against this backdrop, the euro traded higher at levels up to about 140 yen. However, following the publication of surprisingly strong first-quarter GDP growth data and comments by the Bank of Japan's president that he considered a further depreciation of the yen unlikely, the yen once again began to gain in value in the second half of June. What is more, prior to this development, the Bank of Japan had made clear that it did not see any need for further monetary policy measures, thereby countering the speculation about further accommodative action which had been brewing in market circles for some time. Latterly, the euro rebounded once more against the yen as market participants exhibited increased doubts about the Japanese Central Bank achieving its medium-term inflation target of 2%. At the end of the reporting period the euro stood at 138 yen, which was approximately 7% higher than at the end of the first quarter.

... but depreciates against pound sterling

The political uncertainty that had weighed on the pound dissipated following the result of the British parliamentary election, thus allowing the currency to appreciate further. This dynamic was supported by surprisingly positive economic data indicating buoyant economic development on the whole, as well as by the materialising expectations among market participants that interest rates were set to rise in the United Kingdom as well. The upward path followed by pound sterling over the reporting period was only temporarily interrupted between the end of April and the start of June upon the announcement of a series of unexpectedly negative economic indicators. As this report went to press, the euro was trading at £0.71, around 2½% below its value at the end of March 2015.

Gains against the renminbi

By contrast, the euro made relatively strong gains against the renminbi. This arose from the fact that the Chinese central bank changed the mechanism used to set the Chinese currency's reference exchange rate against the US dollar. The People's Bank of China sets a reference exchange rate for the renminbi against the US dollar on a daily basis, with the actual exchange rate allowed to fluctuate either side of this within a band of ±2%. The new mechanism is now more closely oriented to the notifications of market makers, who report the previous day's closing rate on the interbank market to the China Foreign Exchange Trade System & National Interbank Funding Center, a sub-authority of the Chinese central bank. The renminbi subsequently depreciated by roughly 4½% overall against the US dollar in the last few days before going to press. It is now trading against the US dollar at its lowest level since 2011. At the same time, the euro appreciated by just under 4½% against the renminbi over the same period. The new procedure for setting the reference exchange rate is, in the first instance, a step toward greater market orientation. That said, it was introduced at a time when market participants were fearful of a potential weakening of the Chinese economy, raising their concerns that the measure was consciously used by the central bank to weaken the renminbi in order to support the Chinese economy.

Effective euro exchange rate stronger

In effective terms, the European currency appreciated by about 3.5% against the currencies of 19 trading partners over the course of the second quarter. This was in large part attributable to the aforementioned appreciation of the euro vis-à-vis the renminbi, whose relative weighting against the effective euro has further increased owing to a recalculation of the weights (see the box on pages 40 to 42). As a consequence, the price competitiveness of euro-area exports has deteriorated slightly, though without diverging significantly from its long-term average, and should therefore be regarded as neutral.

Securities markets and portfolio transactions

European bond market influenced by monetary policy

Bond markets in the euro area continued to be influenced by the asset purchase programme agreed upon in September 2014 and expanded in January 2015. The Eurosystem has also been purchasing bonds from euro-area central governments, agencies and European institutions since March 2015. In this market environment, yields on ten-year Bunds fell at the start of the second quarter to a new all-time low of less than 0.04%. Aside from the expanded asset purchase programme, other factors contributing to the decline in Bund yields included the interest rate linkage with the United States, where interest rates also fell appreciably for a time, and receding levels of uncertainty, as reflected in the implied volatilities of options on Bund futures. At the end of April, the Bund yield rose from its historical low in several waves, climbing to almost 1.0% at the end of June, which is likely to have been a correction to preceding exaggerations. Furthermore, the economic outlook for the euro area and the United States stabilised. In the ensuing period, there were price movements on Bunds, which were determined in part by the progress of negotiations between the creditor group and the Greek government. However, there were also intensified liquidity-related fluctuations, as evidenced, for example, by widened bid-ask spreads. These are fairly unusual in large and deep markets. With the depreciation of the renminbi in mid-August, however, interest rates fell markedly once again. Despite this, the yield on ten-year Bunds rose, on balance, by 40 basis points over the period under review.

Yield spreads over German Bunds broadly stable

By and large, yields on bonds issued by other euro-area countries have followed a similar path to that of Bunds. On balance, yield spreads over Bunds barely widened on the end of the first quarter. Based on the GDP-weighted yield on ten-year bonds issued by euro-area countries, the spread was 95 basis points at last count. The yield movements are primarily attributable to the monetary policy-related and global factors mentioned earlier. Country-specific influences played less of a role overall, though Greek government bonds are the exception here. Amid increasing fears among market participants that the Greek government could potentially halt interest payments and principal repayments, the yields on Greek government bonds temporarily rose to a level last seen in mid-2012. However, in contrast to the situation at the height of the euro-area sovereign debt crisis in 2010, during the reporting period market participants' fears of a default

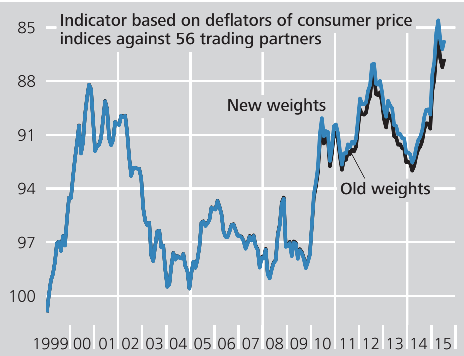
Recalculated weights for indicators of the German economy's price competitiveness

The Bundesbank regularly calculates and publishes indicators of the German economy's price competitiveness, which reflect price and cost developments in Germany in comparison with a weighted average of Germany's trading partners. These indicators correspond to the concept of real effective exchange rates, as calculated by the European Central Bank for the euro, for example.[1] When calculating the indicators, the individual partner countries are assigned trade weights which are adjusted over time to reflect changes in direct and indirect trade flows.[2] The regular adjustments aim to take account of current developments in foreign trade. The same applies to the latest recalculation. Prior to these modifications, the trade weights for all indicator series from 2007 onward were based on the data from the years 2007 to 2009.[3] By contrast, the recalculated indicator values applying since 2010 use weights derived from trade links prevailing between 2010 and 2012.

The table on page 41 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 the narrow and the medium-sized group of countries can be determined by simply rescaling the weights calculated for the broad group.[4] Shifts in Germany's trading relations are reflected in at times considerable deviations of the current weights from those seen in the previous period (2007 to 2009). For instance, the weight assigned to Germany's trade relations with China has risen further to stand at 11%. In terms of the indicators of Germany's price competitiveness against the medium-sized and the broad group of countries, China now boasts the highest trade weight of all of Germany's trading partners. In the preceding three-year periods, France had held its ground as Germany's most important partner country but according to the latest calculation its prominence diminished somewhat (to just under 8½% in the broad group).[5] South European euro-area member states have likewise seen a slight decline in their weight. Similarly, the United States and the United

Price competitiveness of the German economy

1999 Q1 = 100, monthly, log scale[1]



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

1 The calculation method is described in detail in M Schmitz, M de Clercq, M Fidora, B Lauro and C Pinheiro (2012), Revisiting the effective exchange rates of the euro, ECB Occasional Paper No 134. The most recent modifications to the method can be found in Deutsche Bundesbank, Adjustments in the calculation of effective exchange rates and indicators of price competitiveness in August 2013, Monthly Report, August 2013, pp 50-52.
2 Direct trade flows affect direct bilateral trade between two given countries while indirect trade flows are geared to the fact that countries compete not just in the markets of the two countries in question but among one another on a worldwide basis.
3 This most recent regular adjustment to the aforementioned weights is collated in Deutsche Bundesbank, Monthly Report, February 2012, p 35.
4 The rescaling is achieved by proportionately distributing the weights of the countries which do not belong to the group of countries under review to those of the remaining countries.
5 The greater weight attached to China than to France is attributable to the fact that, with respect to industrial goods, German exporters face greater competition in the target countries from Chinese merchants than they do from French ones. Disregarding this third-market effect, the weight accorded to France would stand at 9.7%, trailed by China at 8.2%.

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

In thousandths

Group of countries/country	Up to 1997[1]	1998-2000	2001-2003	2004-2006	2007-2009	From 2010[2]
Narrow group of countries	780.1	772.0	746.9	711.9	678.9	636.2
Belgium	55.8	48.1	52.2	56.4	56.3	49.5
Estonia	0.5	0.7	0.9	1.0	1.0	1.0
Finland	10.6	11.3	11.2	11.0	10.6	8.0
France	112.8	107.2	100.3	93.2	89.1	83.7
Greece	4.7	4.5	4.3	4.5	4.5	3.0
Ireland	9.8	15.7	16.0	12.4	10.7	9.4
Italy	86.5	79.6	75.2	72.1	70.0	62.9
Latvia	0.6	0.7	0.9	0.8	0.9	0.9
Lithuania	1.0	1.1	1.5	1.6	1.9	1.9
Luxembourg	3.7	3.1	3.7	4.1	4.2	3.3
Malta	0.5	0.5	0.5	0.4	0.5	0.4
Netherlands	64.9	65.0	63.6	67.1	69.7	69.0
Austria	43.9	42.4	41.3	42.0	42.1	41.0
Portugal	10.7	10.6	9.7	7.9	7.1	6.5
Slovenia	5.1	4.7	4.5	4.5	5.1	5.0
Spain	35.7	37.2	38.0	39.4	38.1	32.7
Cyprus	0.3	0.3	0.3	0.5	0.5	0.3
Denmark	15.5	13.9	14.3	13.4	13.3	11.1
Sweden	22.6	21.2	19.5	20.8	20.0	19.1
United Kingdom	82.0	80.9	76.4	70.2	60.0	54.7
Norway	7.0	6.0	5.7	5.3	5.7	5.1
Switzerland	43.5	38.3	38.2	35.9	36.2	37.4
Slovakia	5.4	6.9	9.0	10.3	11.6	13.1
Japan	59.2	54.5	44.7	39.1	34.3	34.1
Canada	7.9	8.7	8.9	8.3	7.5	7.5
USA	89.9	108.9	106.1	89.7	78.0	75.6
Medium-sized group	121.3	134.4	160.6	189.7	217.3	249.7
Bulgaria	1.1	1.3	1.6	2.1	2.4	2.5
Croatia	2.5	2.0	2.1	2.1	2.1	1.6
Poland	18.5	21.8	25.0	26.9	33.3	35.3
Romania	3.9	4.3	5.3	7.0	8.7	9.8
Czech Republic	16.9	20.8	26.3	25.9	30.3	31.8
Hungary	10.9	16.6	18.9	19.4	18.6	17.4
China	26.4	31.4	44.8	64.5	84.4	110.2
Hong Kong SAR	11.4	10.1	10.0	10.3	9.2	10.3
Republic of Korea	16.1	13.9	14.7	19.3	18.0	19.3
Singapore	9.4	8.5	8.2	8.4	6.4	7.1
Australia	4.2	3.7	3.7	3.8	3.9	4.4
Countries additionally included in broad group	98.6	93.6	92.5	98.4	103.8	114.1
Iceland	0.3	0.4	0.5	0.6	0.6	0.5
Israel	4.2	4.3	3.9	3.1	3.0	3.3
Russia	12.2	9.7	11.7	15.8	19.4	20.4
Turkey	14.0	13.4	13.3	16.0	15.9	17.4
Algeria	0.4	0.3	0.4	0.5	0.6	0.6
Morocco	1.3	1.4	1.3	1.2	1.3	1.4
South Africa	5.7	5.6	6.1	6.5	6.0	6.4
Argentina	2.1	1.9	1.2	1.2	1.5	2.1
Brazil	8.0	7.3	6.3	7.0	8.1	8.7
Chile	1.4	1.2	1.2	1.9	2.0	2.2
Mexico	4.9	7.5	7.8	7.5	7.9	8.5
Venezuela	0.8	0.8	0.7	0.6	0.6	0.5
India	7.4	6.1	6.6	8.3	10.8	12.9
Indonesia	5.6	4.2	4.0	3.4	3.3	4.0
Malaysia	7.2	6.7	6.5	6.1	5.8	6.7
Philippines	2.6	3.2	3.5	2.9	2.1	2.1
Taiwan	13.3	13.8	11.5	10.0	8.8	9.6
Thailand	6.5	5.2	5.3	5.1	5.5	6.2
New Zealand	0.7	0.6	0.7	0.7	0.6	0.6
Total	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0

1 Basis 1995 to 1997. **2** Basis 2010 to 2012.
Deutsche Bundesbank

Kingdom have experienced a further contraction in their relative shares of trade with Germany. Under the revised calculation, the weight attached to Japan and the Philippines has remained virtually unchanged. The rest of Asia also recorded moderate relative increases. To summarise, the emphasis in Germany's relative trade flows has shifted away from its traditional EU trading partners and the United States to Asian countries.

In the case of the broader group of countries, the indicators derived from the recalculated weights show a somewhat stronger improvement in the German economy's price competitiveness than was previously evident (see chart on page 40). This was partly caused by the shift in emphasis in favour of Asian countries, whose currencies (with the exception of the yen) have all appreciated against the euro since 2010 in net terms. In this regard, China's enhanced status as a trading partner, coupled with the marked appreciation of the renminbi against the euro from the end of 2009 to July 2015, has been of particular importance.

The recalculated indicator of price competitiveness against the broad group of 56 countries and the medium-sized group of 37 countries for the period in question now shows an improvement of 12½% and 12% respectively, whilst if applying the old weights there would have been a slightly lower rise of 11% in each case. This effect is due to the fact that price developments in the now more heavily weighted countries have been more unfavourable on the whole than the average for the partner countries. However, modifying the weights only negligibly influences the path followed by the narrow indicator.

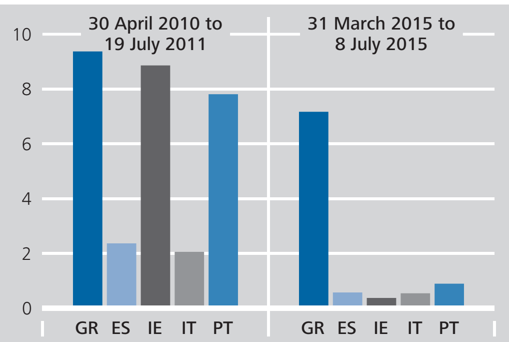
on Greek government bonds only mildly impacted on the financing conditions of other periphery countries (see chart below).

Yields in international bond markets present a mixed picture

In the US bond markets, yields on ten-year government bonds likewise rose on balance, though less sharply than in the euro area. This was largely shaped by investor uncertainty with regard to the US Federal Reserve making an upfront change to interest rates. Latterly, the likelihood of an early rise in interest rates as appraised by market participants initially increased given some surprisingly positive economic data. However, this likelihood decreased again quite considerably when the Chinese central bank decided to change the procedure used to set the renminbi's reference exchange rate to the US dollar and thus, in effect, to devalue the currency. US yields subsequently fell somewhat. In the upshot, the spread between ten-year US bonds and Bunds of an equivalent maturity narrowed to 160 basis points. In Japan, too, the interest on ten-year government securities mirrored global movements, albeit within a rather narrow corridor. Ultimately, bond yields in Japan remained virtually unchanged. For some time now, activity in the Japanese bond market has been dominated by purchases on the part of the Japanese central bank.

Changes in the spreads between euro-area government bonds with a residual maturity of ten years and comparable German Bunds

Percentage points



Source: Thomson Reuters.
Deutsche Bundesbank

Steeper yield curve for German Federal securities

The slope of the German yield curve derived from the yields on Federal securities has steepened since the end of March 2015, but continues to be in negative territory up to the five-year maturity segment. At the end of March, even Bunds with a residual maturity of just under seven years had a negative yield. When last measured, the yield spread between ten-year and two-year bonds was 90 basis points, putting it 45 basis points above its level at the end of March (see adjacent chart). Yields remained at low levels, particularly at the short end, suggesting that market participants expect accommodative monetary policy for some time to come.

Forward inflation rate in the euro area up slightly

The market-based five-year forward inflation rate in five years in the euro area as derived from inflation swaps rose slightly compared to the end of March to stand at 1.7%. Meanwhile, the forward inflation rate in the USA fell slightly to 2.2%. The influence of global factors on the expected inflation rate is manifested in a broadly parallel development with regard to market-based inflation expectations in the various currency areas. Most recently, inflation expectations were down on account of the drop in oil prices, then fell yet further with the devaluation of the renminbi. In the euro area, survey-based inflation expectations are still outpacing market-based break-even rates, which indicates that a negative inflation risk premium has been factored into market-based indicators.

Financing conditions for enterprises remain favourable

Market prices for European corporate bonds were largely dictated by the development of government bond yields. After BBB-rated bonds with a residual maturity of seven to ten years dipped to historic lows in the first quarter, at last count they were yielding 2.3%, just under 70 basis points up on the end of March. In the same period, the yield spread vis-à-vis government bonds widened by 35 basis points to 190 basis points. The price corrections seen for Bunds also extended to corporate bonds. The higher yields on safe investments may have weakened the "search for yield", causing spreads to widen slightly. The rise in yields on financial corporations was stronger than for non-financial corporations. Nevertheless, the values are still significantly below their long-term average, meaning that financing conditions for enterprises remain very favourable.

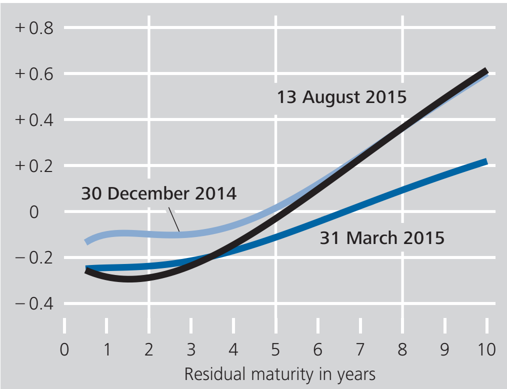
Bond yields in Germany and the USA

Monthly data

1 Source: Thomson Reuters.
Deutsche Bundesbank

Yield curve on the German bond market*

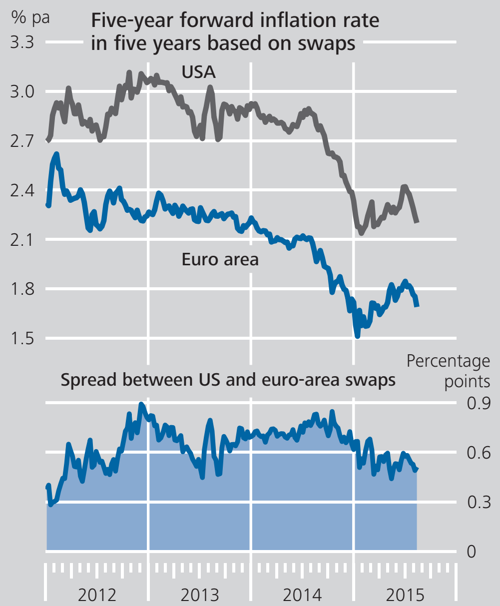
%



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

Forward inflation rates* in the euro area and the USA

Weekly averages



Sources: Bloomberg, Thomson Reuters and Bundesbank calculations. * Derived from the fixed cash flow arising from inflation swaps which is swapped for the actual annual inflation rates (HICP excluding tobacco for the euro area and CPI Urban Consumers for the USA) realised across the next five or ten years.

Deutsche Bundesbank

Investment activity in the German securities markets

€ billion

Item	2014 Q2	2015 Q1	2015 Q2
Debt securities			
Residents	13.4	53.7	12.9
Credit institutions	1.2	9.7	−39.4
of which			
Foreign debt securities	2.3	3.0	− 5.5
Deutsche Bundesbank	− 4.4	12.5	36.1
Other sectors	16.6	31.4	16.2
of which			
Domestic debt securities	−13.2	− 3.6	2.2
Non-residents	13.7	0.2	−27.6
Shares			
Residents	17.5	− 1.5	10.4
Credit institutions	2.8	10.5	− 2.8
of which			
Domestic shares	0.5	11.8	− 6.8
Non-banks	14.7	−11.9	13.2
of which			
Domestic shares	1.6	−17.5	1.4
Non-residents	7.9	6.0	8.6
Mutual fund shares			
Investment in specialised funds	11.7	45.9	24.6
Investment in retail funds	2.5	9.6	2.6
of which			
Equity funds	0.4	3.0	− 2.6

Deutsche Bundesbank

Net redemptions in the German bond market

Gross issuance in the German bond market amounted to €307½ billion in the second quarter of 2015 and was therefore well below its previous-quarter level (€405½ billion). After deducting redemptions and taking account of changes in issuers' holdings of their own bonds, net redemptions came to €22 billion. In addition, foreign borrowers continued to place debt securities worth €7½ billion in the German market. Thus, redemptions totalling €14½ billion net were carried out in the German bond market in the reporting period.

Credit institutions' capital market debt lower

Domestic credit institutions continued the trend of the previous quarter by scaling back their capital market borrowing by €18 billion (compared to net issuance of €10 billion in the first quarter). In the main, they redeemed debt securities issued by specialised credit institutions (€8 billion), and to a lesser extent other bank securities that can be structured flexibly as well as public Pfandbriefe (€5½ billion in each case). These redemptions were partly offset by net issuance of mortgage Pfandbriefe amounting to €1½ billion.

Net public sector redemptions

The public sector redeemed bonds amounting to €4½ billion net in the second quarter, compared to €5 billion one quarter earlier. These figures include issues by resolution agencies set up for German banks, which are ascribed to the public sector for statistical purposes. For its part, the Federal government mainly issued ten-year and 30-year bonds (for €8 billion and €5½ billion respectively). This contrasted with net redemptions of Federal notes (Bobls) totalling €7½ billion. In the quarter under review, state governments redeemed their own bonds to the value of €8 billion in net terms.

Net issuance of corporate bonds

Domestic enterprises issued debt securities worth €½ billion net in the second quarter. On balance, these were chiefly securities with maturities of less than one year. Viewed in net terms, the issues are attributable solely to non-financial corporations, while other financial intermediaries redeemed bonds on balance.

Purchases of debt securities

In the second quarter, the Bundesbank was the dominant buyer, purchasing bonds for €36 billion under the Eurosystem's purchase programme. In accordance with the programme's rules, the vast majority of these were in the form of Federal securities. Foreign investors were the largest sellers of public sector paper in net terms, divesting investments of this kind to the tune of €23½ billion. In addition, they also parted with small amounts of securities issued by the private sector. Domestic non-banks acquired debt securities for €16 billion, with a particular emphasis on foreign securities (€14 billion). By contrast, bonds were sold by German credit institutions and non-resident investors (€39½ billion and €27½ billion respectively), with credit institutions mainly disposing of private-sector instruments.

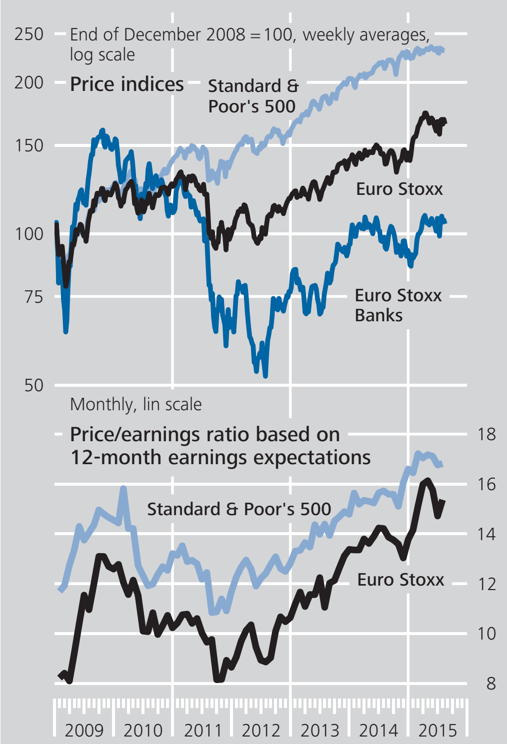
Uneven developments on global stock markets …

The global equity markets have seen mixed developments since mid-March. While in Japan the Nikkei 255 rose distinctly by 7.2% and in the USA the broad S&P 500 nudged up slightly by 0.7%, the Euro Stoxx saw large declines (-3.8%), with the German CDAX encountering substantial losses (-8.6%). In China, the Shanghai Composite closed 5% up on its level at the end of March. However, it effectively fell by just over 23% compared with its high in mid-June and only stabilised following massive intervention by the Chinese authorities in stock market activities. The share price crash in the Far East was accompanied by a downward revision of profit and dividend expectations in China, which – measured on the basis of enterprises' fundamental developments – had probably been overly optimistic.

… bear witness to a rise in interest rates

An important reason for the divergent development of equity prices in the different currency areas was the varying degree of interest rate changes, which, taken in isolation, influence the present value of future corporate earnings via the discount factor. Yields in Japan in the reporting period remained virtually unchanged, yet in the United States and, to a marked degree, in the euro area they drifted upwards. The influence of the discount factor is particularly noticeable in the euro area, where price declines on the Euro Stoxx and CDAX coincided with rising yields on European government bonds. Prices in the euro area were additionally depressed by eroded share prices in China and the appreciation of the euro vis-à-vis the currencies of important trading partners. The aforementioned decision by the Chinese central bank was the main driver behind an appreciation of the euro in nominal effective terms, which predominantly impacted on export-oriented enterprises. This is likely to have affected the German market particularly strongly. When assessing the falls in prices in the euro area and Germany, it is important to remember that these followed on from a several-year high in the case of the euro area as a whole and an all-time high in the case of Germany, and that the price gains since the start of the year continue to be in double figures. The ripple effects from China were probably less to do with the global exchange rate arrangement than with investors' fears that this

Equity markets



Source: Thomson Reuters and Bundesbank calculations.
Deutsche Bundesbank

Major items of the balance of payments

€ billion

Item	2014 Q2	2015 Q1	2015 Q2p
I Current account	+ 45.5	+ 57.2	+ 57.3
1 Goods[1]	+ 54.8	+ 60.4	+ 69.7
2 Services[2]	− 8.2	− 6.6	− 8.4
3 Primary income	+ 5.7	+ 18.9	+ 3.5
4 Secondary income	− 6.8	− 15.6	− 7.4
II Capital account	+ 0.5	+ 0.2	+ 1.2
III Financial account (increase: +)	+ 57.2	+ 54.5	+ 73.8
1 Direct investment	+ 22.7	+ 24.7	+ 3.2
Domestic investment abroad	+ 28.6	+ 39.4	+ 21.5
Foreign investment in the reporting country	+ 5.9	+ 14.7	+ 18.2
2 Portfolio investment	+ 18.5	+ 50.2	+ 48.9
Domestic investment in foreign securities	+ 41.3	+ 56.6	+ 26.2
Shares[3]	+ 4.8	+ 0.3	+ 10.7
Investment fund shares[4]	+ 8.6	+ 17.4	+ 8.1
of which Money market fund shares	− 2.1	− 1.7	− 1.6
Long-term debt securities[5]	+ 26.8	+ 32.8	+ 10.4
of which Denominated in euro[6]	+ 22.8	+ 21.7	+ 2.0
Short-term debt securities[7]	+ 1.0	+ 6.1	− 2.9
Foreign investment in domestic debt securities	+ 22.8	+ 6.5	− 22.7
Shares[3]	+ 8.3	+ 1.6	+ 8.5
Investment fund shares	+ 0.8	+ 4.7	− 3.6
Long-term debt securities[5]	+ 13.6	− 13.8	− 26.2
of which Issued by the public sector[8]	+ 10.3	− 18.7	− 18.3
Short-term debt securities[7]	+ 0.1	+ 14.0	− 1.4
3 Financial derivatives[9]	+ 10.1	+ 11.7	+ 8.2
4 Other investment[10]	+ 6.6	− 32.1	+ 13.9
Monetary financial institutions[11]	+ 41.8	− 66.5	+ 9.7
Enterprises and households[12]	− 5.4	+ 8.2	+ 5.7
General government	− 3.6	− 6.4	+ 5.0
Bundesbank	− 26.2	+ 32.7	− 6.6
5 Reserve assets[13]	− 0.6	0.0	− 0.5
IV Errors and omissions[14]	+ 11.2	− 3.0	+ 15.3

1 Excluding freight and insurance costs of foreign trade. **2** Including freight and insurance costs of foreign trade. **3** Including participation certificates. **4** Including reinvested earnings. **5** Long-term: original maturity of more than one year or unlimited. **6** Including outstanding foreign D-Mark bonds. **7** Short-term: original maturity up to one year. **8** Including bonds issued by the former Federal Railways, the former Federal Post Office and the former Treuhand agency. **9** Balance of transactions arising from options and financial futures contracts as well as employee stock options. **10** Includes in particular financial and trade credits as well as currency and deposits. **11** Excluding the Bundesbank. **12** Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households. **13** Excluding allocation of special drawing rights and excluding changes due to value adjustments. **14** Statistical errors and omissions, resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.

Deutsche Bundesbank

could reflect an unexpectedly marked slowdown in growth in China. On top of this, developments in Greece dampened the mood in European markets, as evidenced by a temporary sharp upturn in the implicit volatility of options on the Euro Stoxx. By contrast, the pronounced slide in prices on the Athens Stock Exchange upon the reopening of the financial centre after five weeks' of closure did not spill over into other stock markets. In Japan, share prices were also bolstered by rising enterprises' profit margins, which have been on the up for some time, and the widespread opinion in market circles that potential additional monetary policy interventions would benefit stock markets, too. The mixed patterns of economic developments in individual countries played somewhat less of a role among equity market participants in the reporting period.

Enterprises' earnings expectations up, price-earnings ratio down

Pressured by the price falls on the Euro Stoxx, the price-earnings ratio – as measured against its value at the end of March – was down by just over one point to 15.0. However, in comparison to historical figures, this is still a very high level. The five-year average of this ratio is 11.7. Excluding developments since the end of April, this constitutes its highest value since 2004. The gains on the US S&P 500 were accompanied by greater profit expectations, with the effect that the price-earnings ratio based on 12-month profit expectations held steady at 16.8 and thus remains at a historically high level.

By means of a dividend discount model it is additionally possible to quantify the implied cost of equity.[1] This cost takes into account the price level as well as the profit growth expected in the medium term and the dividend level. In the case of European enterprises, the cost of equity – starting from a level below the five-year average – fell further still, shedding 15 basis points to stand at 7.5%. Against the back-

1 The dividend discount model is based on month-end values and takes into account developments up to the end of July 2015.

drop of increased real interest rates – which are incorporated into the cost of equity calculation – the equity risk premium has fallen, which points to a moderately increased risk appetite among actors in the stock market. Meanwhile, the real cost of equity has remained virtually unchanged for US enterprises. If one considers that the real interest rate has also increased in the United States, one can discern a fall in the equity risk premium in the United States, too, albeit less pronounced than in the euro area. This observation is consistent with the overall picture of declining implicit stock market volatilities in the USA, as calculated from stock options.

Stock market funding and stock purchases

Issuing activity on the German equity market in the second quarter was somewhat stronger than at the start of the year. Domestic enterprises issued new shares to the tune of €3 billion, the majority of which were listed equities. The volume of foreign shares in the German market rose by €16 billion in the same period. Equities were primarily acquired by domestic non-banks (€13 billion), but also by non-resident investors (€8½ billion), while domestic credit institutions offloaded equity instruments in the amount of €3 billion.

Sales and purchases of mutual fund shares

During the quarter under review, domestic investment companies recorded inflows of €27 billion, after raising funds totalling €55½ billion in the previous three-month period. The new inflows mainly benefited specialised funds reserved for institutional investors (€24½ billion). Among the various asset classes, mixed securities-based funds proved the most active in issuing new shares (€24 billion), but funds of funds (€3½ billion) and open-end real estate funds (€3 billion) were also engaged in the market. Foreign funds traded in the German market attracted inflows totalling €8 billion net in the second quarter of 2015. Domestic non-banks proved to be the main buyers, adding €35 billion worth of mutual fund shares to their portfolios, predominantly in the form of domestic shares. German credit institutions purchased investment fund shares for €4 billion, while foreign investors sold mutual fund shares worth €3½ billion.

Direct investment

Capital exports in direct investment

As with cross-border portfolio investment, which saw net outflows totalling €49 billion in the second quarter of 2015, there were also net capital exports in the field of direct investment. These amounted to €3 billion.

German direct investment abroad

A key factor in events was the comparatively high level of funding provided by resident owners to affiliated enterprises abroad, which amounted to €21½ billion in the second quarter of 2015. Domestic investors primarily bolstered their equity capital (€13½ billion), doing so exclusively via cross-border new investments (€18½ billion). Debt instruments also played a certain role here on balance (€8 billion). The expanded granting of financial credits (€10 billion) to non-residents contrasted with a slight fall in trade credits (€1½ billion). Broken down by region, it is evident that during the reporting period approximately one-third of direct investment originating in Germany was made in the Americas, primarily in the United States (€4½ billion). Other important destinations were Luxembourg (€3 billion), the Netherlands (€2 billion) and Belgium (€1½ billion).

Foreign direct investment in Germany

In the second quarter of 2015, direct investment in Germany by non-resident investors amounted to just under €18 billion. Thanks to group-internal shifts in lending, foreign investors' claims against residents grew on balance by €12½ billion. This was achieved almost exclusively through an increase in financial credits (€11 billion). The balance of foreign trade credits to German enterprises rose by the relatively small amount of €1 billion. Foreign investors also shored up their equity capital by €6 billion. Here, too, the lion's share was focused on new investments (€5 billion). Parallel to this, foreign enterprises also reinvested their earnings in Germany (€2½ billion).