Financial markets

Financial market setting

Now that "Brexit shock" has died down, financial markets looking to monetary policy and US presidential election outcome

The UK's referendum decision to leave the EU dominated the financial markets around the middle of 2016. Fears of an economic slump, primarily in the United Kingdom itself but also affecting other countries, and the associated expectation of long-term accommodative monetary policy drove down share prices and government bond yields. However, over the summer these initial fears failed to materialise, resulting in the markets recovering over the third quarter. Towards the end of the period under review, expectations regarding future monetary policy on both sides of the Atlantic determined yield movements. The financial markets were also affected by the outcome of the US presidential election, which caught many observers off guard. Against a backdrop of rising inflation rates and solid economic figures, the rise in ten-year US Treasury yields (+84 basis points to 2.3%) and in German Federal securities with the same maturity (+37 basis points to 0.2%) reflects heightened expectations of key rates being raised at the December meeting of the Fed's Federal Open Market Committee (FOMC) and of a more expansionary US fiscal policy. Developments in the financial markets in Japan, meanwhile, were dominated by the Japanese central bank's decision in September to change strategies. Under its new strategy, the central bank is not only willing to allow inflation to temporarily overshoot the original target of 2%, yields on ten-year bonds will, moreover, be stabilised at around the zero mark. There has therefore not been a significant rise in yields in Japan since the end of June. The effective exchange rate of the euro has remained unchanged on balance since the start of the second half of the year. The euro's appreciation against the pound sterling, linked to the referendum decision and the subsequent monetary policy measures taken by the Bank of England, was offset by losses against other currencies.

Exchange rates

Euro down against the US dollar on balance

The euro weakened by 3.5% against the US dollar since the start of the third quarter of 2016. It was priced at US$1.13 in mid-August. Back then, various statements by members of the Fed's FOMC gave some market participants the impression that key rates in the United States could be raised as early as September. This put some pressure on the euro compared to the US dollar. However, expectations of a rate increase evaporated again at the start of September after US economic indicators disappointed the markets. The euro recovered again somewhat as a result.

Euro-US dollar rate driven by expectations for US monetary and fiscal policy

Nevertheless, the euro gradually dropped in value again from the end of September as the economic outlook for the United States improved. Aside from the upwards revision of economic growth in the second quarter, a surprising increase in industrial new orders and an unexpectedly strong recovery in the purchasing manager indices also contributed to this improvement. In this context, the probability that the market assigns to the US Fed raising key rates in December also grew. Thus the interest rate advantage the United States holds over the euro area increased in both the short and long-term maturity segment, helping drive down the euro. The US interest rate advantage in ten-year government bond yields narrowed again temporarily at the end of October, however, giving the euro another boost. Following what was for many observers a surprising outcome of the US presidential election, market participants speculated that extensive debt-funded public spending programmes could be approved next year. The subsequent steep rise in yields in the United States put the euro under downward pressure. It was trading at US$1.07 against the US dollar as this report went to press.

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 somewhat stronger on balance against the yen

The euro put in a mixed performance against the yen during the reporting period. Starting in mid-July, the euro was initially characterised by a period of weakness against the yen, lasting around a month. This development halted when the market interpreted the wording of comments by government representatives as a warning of market intervention. At the end of August it emerged that Japan's inflation rate in July had remained very low. Subsequently, the governor of the Bank of Japan emphasised that there was still plenty of scope for additional monetary policy easing measures. The ensuing appreciation in the euro soon petered out again, however, as uncertainty persisted about the Bank of Japan's monetary policy intentions. Consequently, even after the central bank's resolution to manage Japan's yield curve, fluctuations in the euro-yen exchange rate continued without either currency gaining a lasting advantage. Towards the end of the period under review, the euro stood at ¥117, which was 2.7% higher than at the beginning of the third quarter of 2016.

Temporarily, massive gains for euro against pound sterling

Since the UK referendum vote at the end of June to leave the EU, the pound sterling has temporarily depreciated massively – including against the euro. In mid-October, the effective exchange rate, measured as the weighted average against the currencies of 19 important trading partners, was at its lowest level since these calculations were first started in 1972 – except for two days at the peak of the financial crisis at the end of 2008. Following an initial rise in the euro's value immediately after the referendum, the euro was trading at £0.83 at the start of the second half of the year. The single currency continued its upward movement after the Bank of England lowered its key rate at the beginning of August and recommenced asset purchases. At £0.87, however, there was a three-week correction in mid-August. This was driven by a series of unexpectedly favourable UK economic figures, which strengthened the impression in the market that the decision to leave the EU would have no negative effects on the real economy in the short-term at least. Labour market and retail data, survey results on consumer confidence and purchasing manager indices were better than expected, for instance.

Pound sharply lower on 7 October 2016

Throughout September, the euro displayed another period of strength against the pound sterling. This may have initially been linked to the UK's surprisingly weak figures for manufacturing output. Subsequently, the main factor weighing on the pound were fears that British negotiators might not prioritise continued unrestricted access to EU markets in negotiations over leaving the EU. When the British prime minister appeared to confirm these fears in a speech at the beginning of October, in which

she also gave a date for the beginning of exit negotiations for the first time, the euro's appreciation accelerated. Early in the morning of 7 October 2016, the pound sterling even moved sharply lower within a very short period of time in Asian trading. Though a subsequent countermovement quickly corrected the sharp decline, the euro's reference exchange rate against the pound was set 2.3% higher than the day before. When a court ruled at the beginning of November that the British parliament would have to consent to the official introduction of negotiations on the United Kingdom's exit from the EU, this sparked hopes in the market of a more business-friendly negotiation strategy on the part of the United Kingdom. This placed considerable pressure on the euro-pound exchange rate. As this report went to press, the single currency was therefore back at £0.86, which translates into a gain of 4.1% since the end of June.

Effective euro rate unchanged

The euro's effective exchange rate against the currencies of 19 important trading partners has remained unchanged in net terms since the start of the second half of the year (±0.0%). This development must be seen in the light of the sharp volatility over the last few years. In trend terms, there has, overall, been a nominal depreciation of the euro since the start of the financial crisis. This is a key reason why euro-area producers' price competitiveness improved during this period. Even the euro-area countries that were especially hard hit by the crisis have improved their competitive position in the global markets in recent years – in some cases considerably. This is a reflection of exchange rate developments as well as favourable developments in prices and wages by international standards (see the box on pages 42 to 44).

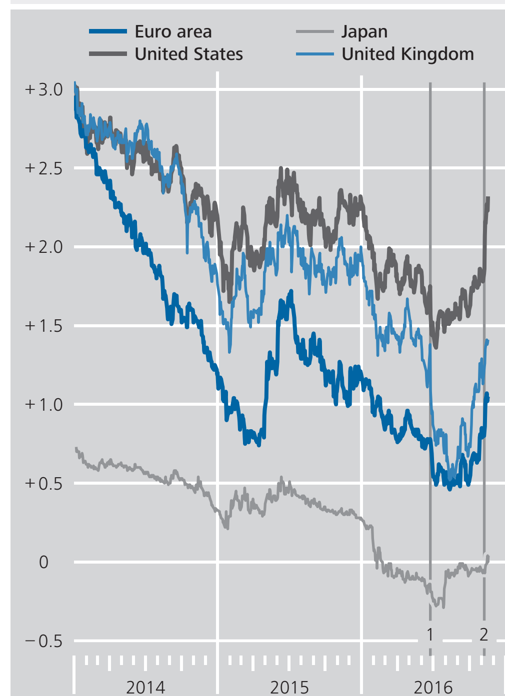
Securities markets and portfolio transactions

Euro-area and US government bond yields have risen

The international bond markets predominantly witnessed an increase in yields in the summer and autumn months. Yields on ten-year

Government bond yields* in euro area and selected countries

% pa, daily data



Source: Thomson Reuters. * Residual maturity of ten years. **1** Brexit referendum. **2** US presidential election.
Deutsche Bundesbank

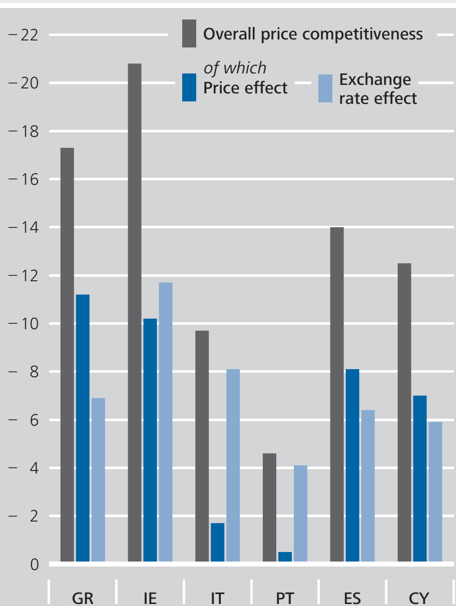
US Treasuries have risen by 84 basis points to 2.3% since the end of June. The probability of the US Federal Reserve raising rates in December, calculated from futures contracts, stood at 96% as this report went to press. By the beginning of November, the drop in yields that took place at the end of June as a result of the Brexit decision had been reversed. There was another rise in yields following the US presidential election, reflecting the expectations of a more expansionary fiscal policy. Ten-year Federal securities mirrored developments in the United States in a more muted form and were quoted at 0.2%, 37 basis points up on their mid-year level. Yields on ten-year securities in the United Kingdom behaved in much the same way, rising 54 basis points since the end of June. The Bank of England's expansionary monetary policy measures of the start of August probably had a dampening effect on the yield rise – at least temporarily. In September, the Bank of Japan decided to pursue a yield curve control strategy, whereby the yield on ten-year Japan-

Price competitiveness in selected euro-area countries

In the first ten years after monetary union was established, Greece, Ireland, Italy, Portugal and Spain suffered a perceptible loss in price competitiveness, not least as a result of above-average rates of wage and price growth. Price competitiveness did not pick up again until after the onset of the global financial crisis and the adjustments that this entailed.[1] As measured by the indicator based on GDP deflators against 37 trading partners, price competitiveness has improved by between 4½% (Portugal) and 21% (Ireland) since the second quarter of 2008, when the US real estate crisis evolved into a global financial crisis. Overall, the countries under consideration here have meanwhile roughly recouped the loss of competitiveness that they suffered in the pre-crisis period; in the second quarter of 2016, Greece even significantly improved its competitive position compared with the first quarter of 1999 (+9½%), and the indicator also shows a slight gain in competitiveness for Ireland and Italy during this period (+1% and +2½% respectively).[2,3]

Change in price competitiveness since the beginning of the crisis*

Percentage change in 2016 Q2 versus 2008 Q2[1]



* Measured by the indicator of price competitiveness based on GDP deflators against 37 trading partners. **1** Inverted scale: an upward bar (a negative value) indicates that price competitiveness has improved.

Deutsche Bundesbank

Recent calculations based on the productivity approach now also paint a fairly positive picture of competitiveness in the countries worst affected by the crisis.[4] According to these data, the competitive position of Greece is neutral and that of the Irish, Spanish and Cypriot economies even favourable. By contrast, measured in terms of changes in productivity, the price competitiveness of Italy and Portugal is fairly unfavourable.

The fact that the euro has depreciated perceptibly against the currencies of important partner countries in recent years, but especially since the spring of 2014, has been a decisive factor in boosting competitiveness in the world markets. At last count, the

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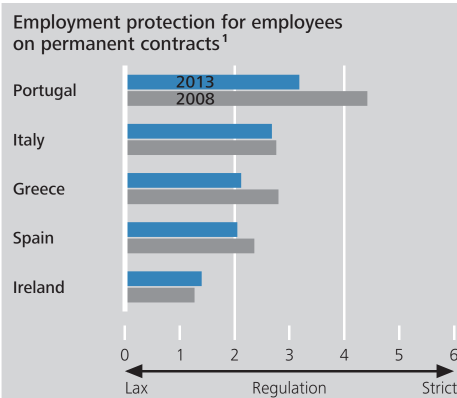
1 For more on improvements in individual euro-area countries' price competitiveness following the onset of the financial crisis, see also Deutsche Bundesbank, Real economic adjustment processes and reform measures, Monthly Report, January 2014, pp 27-29.
2 The remaining countries have improved their competitiveness in recent years, but their competitive position is still slightly less favourable than when monetary union was launched (Portugal: -5% and Spain: -2%).
3 Greece did not join the monetary union until the beginning of 2001 and had raised its price competitiveness significantly in the two years leading up to that event. The gain in the second quarter of 2016 compared with the point at which it joined the euro area (first quarter of 2001) is therefore relatively small (+2%).
4 This approach takes into account the fact that economies that are catching up typically witness a relatively sharp increase in not only the price level but also productivity. The stronger the growth in a country's relative productivity level against its trading partners, the more its relative price level can rise without a loss of price competitiveness. For more information on the different methods of establishing a benchmark for competitiveness, see Deutsche Bundesbank, Macroeconomic approaches to assessing price competitiveness, Monthly Report, October 2013, pp 31-45.

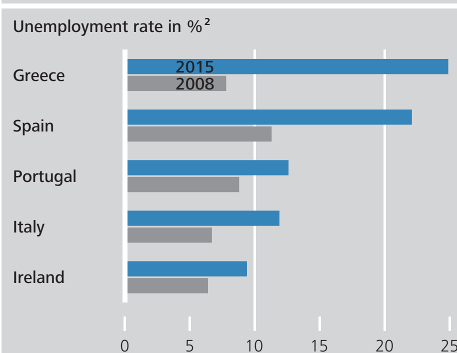
nominal effective exchange rate of the euro (against 19 trading partners) was around 15.5% below the average value in the second quarter of 2008. The Irish economy in particular, for which foreign trade with non-euro-area countries – the United States or the United Kingdom, say – is comparatively important, benefited from developments in the euro's exchange rate.[5] By contrast, the impact of exchange rate movements on Portugal's price competitiveness is relatively small, as Portugal maintains close trade relations mainly with other euro-area countries – first and foremost Spain – and trade with non-euro-area countries is consequently limited.

Within the euro area, where the competitive position is not directly affected by exchange rate movements, Portugal's price competitiveness has deteriorated in recent years. On balance, it was somewhat less favourable of late than at the beginning of the crisis, having temporarily improved to a certain extent during the crisis period. Italy, too, was overall unable to raise its competitiveness against the other euro-area countries – at best, it has stabilised its competitive position in recent years. By contrast, the net price competitiveness of the Irish economy against its euro-area trading partners has improved perceptibly (+8½%) since the onset of the financial crisis (according to the official figures), although it has again suffered a clear loss of competitiveness in recent years – as measured by relative price developments. The other countries considered here have also been able to raise their price competitiveness vis-à-vis their euro-area trading partners since the second quarter of 2008. Improvements range from around 5% (Cyprus) to 9% (Greece).

The indicator based on the unit labour costs of the whole economy paints a consistently more positive picture of the competitive position than price-based indicators. According to this indicator, all of the countries especially hard hit by the crisis have gained in price competitiveness within the euro area since the onset of the crisis, with gains in competitiveness very low for Italy (+1½%) and particularly high for Ireland (35%).[6] The indicator based on labour costs shows a

Employment protection for employees on permanent contracts and unemployment rate





1 The OECD's Employment Protection Indicator (version 2) measures how strictly employment protection and temporary contracts are regulated. It is calculated as the weighted average of the protection for employees on permanent contracts against (individual) dismissal and the specific requirements for collective dismissals. The scale ranges from 0 (lax regulation) to 6 (strict regulation). There are no data for Cyprus, and data for the other countries are available only up to 2013. **2** Annual average. Source: Eurostat.

Deutsche Bundesbank

5 Overall, the trade weight of the non-euro-area countries in the 37-strong circle of countries used to calculate the indicators of price competitiveness added up to around 63% for Ireland and roughly 26% for Portugal.
6 During the crisis period, the dismissal of unproductive workers probably also contributed to the favourable productivity trend and helped drive down unit labour costs.

Corporate environment*

Ranking[1]	Country
1	Singapore
2	New Zealand
3	Denmark
.	
15	Germany
.	
17	Ireland
.	
23	Portugal
.	
33	Spain
.	
45	Italy
.	
47	Cyprus
.	
60	Greece

* Based on the World Bank's Doing Business indicator, which ranks economies on their ease of doing business. **1** Overall, 189 countries were examined, with the country in which doing business is easiest ranked first; data as at June 2015.
Deutsche Bundesbank

notably pronounced and abrupt improvement in price competitiveness for the Irish economy in the last two years. It should be noted, however, that Ireland's GDP data, which are the denominator in the calculation of unit labour costs, are heavily influenced by the non-distributed profits of multinational enterprises. According to a press release issued by Ireland's Central Statistics Office (CSO) in July 2016, Ireland's real GDP growth rate for 2015 was revised upwards extraordinarily sharply (from 7.8% to 26.3%). The CSO and the European Commission attribute this, first and foremost, to corporate restructuring and the relocation of several multinational enterprises to Ireland.[7] The major overhaul of the GDP figures caused an abrupt drop in the Irish economy's unit labour costs, which means that the indicator based on labour costs probably overstates the improvement in the competitive position.

The growth in competitiveness that has been achieved is probably also partly a result of the fact that the countries especially badly affected by the crisis have initiated a number of reforms in recent years. According to the OECD indicator on employment protection and the Doing Business indicator published by the World Bank, Greece, Portugal and Spain have made clear progress on reforming their labour and product markets in recent years. While the World Bank's *Doing Business Report* has always taken a considerably more favourable view of the corporate environment in Ireland, the other countries have improved their position noticeably in recent years. However, despite the progress made, most countries still have considerable adjustments to make before they can hold their own in the international competition to attract international business and ensure competitive companies settle there permanently. This is particularly true of Greece, Cyprus and Italy, which are still fairly low in the Doing Business indicator's ranking both in absolute terms (positions 60, 47 and 45 respectively out of 189 countries) and compared with Ireland (ranked 17th). In addition, high unemployment in Greece and Spain suggests that structural change there is far from complete.

7 See the CSO press release of 12 July 2016 and that of the European Commission of 21 July 2016.

ese government bonds is to be kept close to 0%. Since then, the Japanese yield has decoupled from the rest of the world and hovered around the zero lower bound, at 0.01% at the end of the period under review.

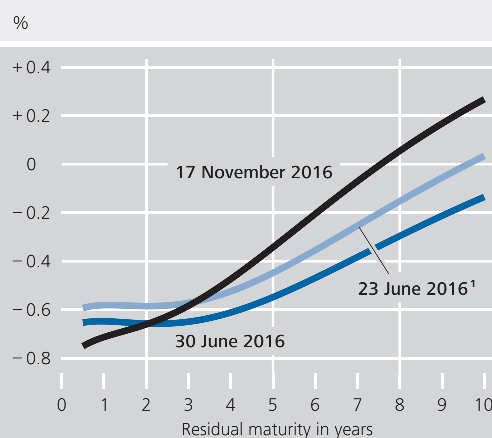
Little change in yield spreads of euro-area countries

Yield spreads between the government bonds of other euro-area countries and Bunds have widened slightly by 10 basis points on balance since the middle of the year. They were at 1.1% as this report went to press. This was in part because the uncertainty surrounding the formation of a government in Spain was resolved at the end of October and concerns that a rating downgrade might make Portuguese government bonds ineligible as central bank collateral ultimately proved unjustified. Meanwhile, the spreads of Italian government bonds widened linked to a deterioration in the country's rating outlook. Concerns over the outcome of Italy's constitutional referendum in December and the fraught situation in its banking sector continued to dominate the markets.

Signals of scarcity in the market for Federal securities

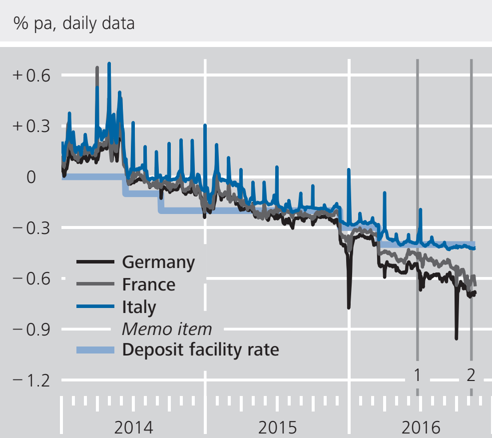
The Federal securities yield curve twisted during the period under review. While long maturities rose as uncertainty eased following the EU referendum in the UK and given the change in expectations regarding US monetary policy, short-term yields continued to fall. The decline in interest rates for short maturities contrasts with the increase in time deposit rates in the money market in the reporting period. This reflects the increasing signals of scarcity in the market for Federal securities. The German Finance Agency (the state's debt management agency) cut its issuance planning for the fourth quarter from €34 billion to €27 billion (excluding inflation-linked securities) because of lower Federal government borrowing requirements. Then, a six-month money market instrument was auctioned in October at a record-low interest rate of -0.72%, despite a simultaneous increase in long-term yields. Overall, demand for the Federal government's primary market issues rose noticeably in the second half of the year, whereas total bids received had fallen short of the planned issue volume for a quarter of the

Yield curve on the German bond market*



* Interest rates for (hypothetical) zero-coupon bonds (Svensson method), based on listed Federal securities. **1** Last data point before the results of the Brexit referendum were announced.
Deutsche Bundesbank

Repo rates*



Source: repofundsrate.com * Money market rates for overnight credit secured by German, French or Italian government bonds. **1** Brexit referendum. **2** US presidential election.
Deutsche Bundesbank

auctions between January and June 2016.[1] Signals of scarcity were also evident in the repo market. Repo rates for transactions backed by Bunds were quoted below the deposit facility rate, reflecting a special scarcity premium for Federal securities (see the above chart).[2] There

1 However, the amount set aside for market management purposes meant that there was never a shortfall.
2 A repo is a money market loan in which collateral is handed over. If the objective is financial investment, the repo rate should not be below the deposit facility rate because money can be safely invested with the Eurosystem at this rate. Rates below the deposit rate therefore represent a premium paid to obtain a specific item of collateral such as Federal securities or French OATs. The difference between the repo rate and the deposit facility rate therefore reflects a premium based on the collateral.

Forward inflation rates* and inflation expectations in the euro area

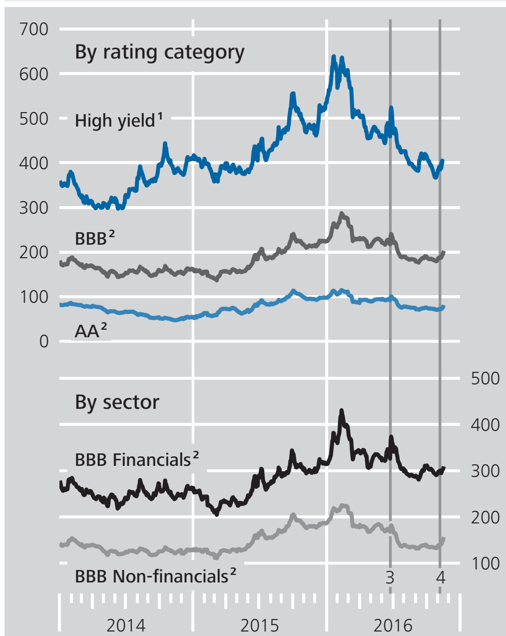
%, weekly averages

Sources: Thomson Reuters, Consensus Economics 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) realised across the next five or ten years. **1** Brexit referendum. **2** US presidental election.

Deutsche Bundesbank

Yield spreads of corporate bonds in the euro area*

Basis points, daily data



Sources: Thomson Reuters and Bundesbank calculations. * Compared with Federal securities with residual maturity of seven to ten years. **1** Merrill Lynch index across all maturities. **2** In each case, iBoxx indices with residual maturity of seven to ten years. **3** Brexit referendum. **4** US presidential election.

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was also a scarcity of French government securities, although it was less pronounced. Particularly high premiums developed for Federal securities with maturities around ten years. Traditionally, these are especially important for futures contracts and accounting purposes. Increasingly, the purchasing programme is also having the effect of reducing the volume available to the private sector. In summer, the yield on Federal securities with maturities up to eight years temporarily fell below the deposit facility rate, meaning that these securities were no longer eligible for central bank purchases. Consequently, the Eurosystem's purchases focused on longer maturities during this period.

Forward inflation rates have risen

On balance, market-based inflation expectations increased in the period under review. Following an all-time low of 1.25% in summer, the five-year forward inflation rate in five years based on swaps stood at 1.6% as this report went to press, which was 25 basis points higher than at the end of June. Five-year spot rates reached a year high in November; having risen by 17 basis points since the end of June, they stood at 0.9% at last count. The waning base effect from last year's drop in oil prices and the consequently low rates of year-on-year inflation are likely to have been significant factors. However, there is still a gap between market-based and survey-based inflation expectations. The signals of scarcity in the government bond market described above also spilled over to the swap market through arbitrage relationships and tend to distort inflation swap rates to the downside. The increasing influence of liquidity distortions has been reducing the economic value of market-based inflation expectations for some time now.

Funding conditions for enterprises still very favourable in spite of recently higher yields

Having declined during the summer, yields on the bonds of European enterprises have recently returned to their mid-year level. By historical standards, funding conditions are therefore still very favourable for enterprises. Corporate bond spreads have fallen since the end of June, in some cases significantly, due to higher yields on Federal bonds. For instance,

the interest rate spread of BBB-rated corporate bonds with a residual maturity of seven to ten years over Federal bonds of the same maturity stood at 2.0 percentage points at the end of the reporting period. This was 29 basis points lower than at the end of June. This development can be attributed, not least, to the Eurosystem's Corporate Sector Purchase Programme (CSPP), which was adopted at the start of March 2016 and has been implemented since 8 June 2016. Under this programme, the Eurosystem purchases debt securities issued by non-financial corporations with high credit quality ratings.[3] As intended, the yield-reducing impact also spread – via portfolio-rebalancing effects – to non-purchased bonds. Starting from higher values, the yield decline in financial enterprises' bonds and high yield bonds – both non-eligible for the asset purchase programme – proved to be even more pronounced than for eligible highly rated bonds of real economy enterprises.

Investment activity in the German securities markets

€ billion

Item	2015 Q3	2016 Q2	2016 Q3
Debt securities			
Residents	70.9	65.1	34.7
Credit institutions	12.4	– 19.7	– 24.2
of which			
Foreign debt securities	3.8	– 5.8	– 14.1
Deutsche Bundesbank	35.8	50.8	48.9
Other sectors	22.7	34.0	10.1
of which			
Domestic debt securities	5.0	6.2	– 5.1
Non-residents	– 17.7	– 24.8	– 27.9
Shares			
Residents	6.8	11.0	10.1
Credit institutions	– 14.5	1.9	0.6
of which			
Domestic shares	– 7.0	0.8	0.1
Non-banks	21.3	9.1	9.5
of which			
Domestic shares	13.8	5.2	0.4
Non-residents	– 5.2	– 5.3	1.2
Mutual fund shares			
Investment in specialised funds	14.7	19.8	17.4
Investment in retail funds	7.3	5.8	3.8
of which			
Equity funds	2.9	0.8	1.9

Deutsche Bundesbank

Moderate net sales in the bond market

Gross issuance in the German bond market stood at €310 billion in the third quarter of 2016 and was therefore below its previous-quarter level (€332½ billion). After deducting redemptions and taking account of changes in issuers' holdings of their own bonds, net issuance amounted to €4 billion. Moreover, foreign borrowers placed debt securities worth €3 billion in the German market. Funds totalling €7 billion net were consequently raised in the German bond market in the reporting period.

Issuance of corporate bonds mainly in the longer-term maturity segment

German enterprises took advantage of the favourable financing conditions and issued debt securities to the value of €4 billion in net terms in the third quarter. This is primarily attributable to non-financial corporations, which mainly placed long-term securities in the market.

Public sector borrowing moderate

The public sector tapped the bond market to the tune of €3 billion from July to September 2016. These figures include issues by resolution agencies set up for German banks, which are ascribed to the public sector for statistical purposes. The Federal government itself mainly issued five-year Federal notes (€10 billion), and to a lesser extent 30-year bonds and two-year Federal Treasury notes (both €3 billion) as well as Federal Treasury discount paper (€2 billion). This contrasted with net redemptions of ten-year Bunds totalling €18 billion. In the quarter under review, state governments issued their own bonds to the value of €1½ billion in net terms.

Fall in credit institutions' capital market debt

Domestic credit institutions reduced their capital market debt in the quarter under review by €3 billion, following net issuance of €14 billion in the second quarter. Here specialised credit institutions in particular redeemed debt securities (€5 billion), as did Pfandbrief banks in the public Pfandbriefe segment (€2 billion). This contrasted with net issuance of mortgage Pfandbriefe amounting to €5 billion.

3 See Deutsche Bundesbank, Financial markets, Monthly Report, August 2016, pp 39-48.<

Sources: Thomson Reuters and Bundesbank calculations. **1** Calculated using the prices of index options. For euro area, calculated from options on Euro Stoxx 50. **2** Brexit referendum. **3** US presidential election.
Deutsche Bundesbank

Bundesbank the main buyer of debt securities in purchasing programmes

The Bundesbank was the predominant buyer of debt securities in the German bond market in the third quarter of 2016, adding €49 billion worth of paper to its portfolio under the Eurosystem's asset purchase programmes. Domestic non-banks increased their pension portfolios by a total of €10 billion, although €5 billion worth of domestic securities were sold. By contrast, non-resident investors parted with German debt securities to the tune of €28 billion. On balance, these were mainly bonds issued by the public sector. Domestic banks also sold interest-bearing securities to the value of €24 billion.

Clear gains on the international equity markets

The international stock markets have initially made significant gains since the beginning of the second half of the year, which more than compensated for what were in some cases substantial mark-downs in the immediate aftermath of the British decision to leave the EU. By August, the broad European Euro Stoxx index had fully recouped the temporary setback it suffered. The US S&P 500 index offset its losses even more quickly and reached a new all-time high in the middle of August of this year. In many areas, the overall positive share price development was accompanied by favourable business figures and slightly better economic data than had initially been expected. The United Kingdom's economic data in particular were more positive than had initially been feared in the wake of the Brexit vote. The depreciation of the pound sterling raised profit expectations, particularly among large British firms with an international focus. In addition, the Bank of England's package of measures is having an expansionary effect, although considerable uncertainty persists about the concrete form the UK's exit from the EU will take. For foreign investors, however, the considerable depreciation of the British pound reduces capital gains on the UK stock market.

The outcome of the US presidential election on 8 November 2016 only resulted in short-lived share price losses, followed by a clear recovery. Overall, the broad Euro Stoxx index has risen by 6% since the end of June 2016, the British FTSE All-Share index by 5% and the US S&P 500 index by 4%. Analysts' earnings expectations lagged behind price developments on both sides of the Atlantic, meaning that the earnings yield as measured by the five-year average suggests high valuations for these stock markets. The Japanese stock market displayed the strongest overall price increase of all the major economies during the period under review (+15%). The Bank of Japan's package of measures, which was announced at the end of September 2016, sent prices sharply higher, albeit with a slight delay, from the start of October.

Bank shares still under scrutiny despite rallying

While bank shares suffered what were in some cases significant losses in the middle of the year following the Brexit decision, they exhibited a clear upward trend in the ensuing months. Looking at the reporting period as a whole, bank shares significantly outperformed the market in the euro area (+27%) as well as in the United States (+28%). The gains were driven in part by the mostly positive surprises in the end-of-quarter results published by European and US banks. Nonetheless, European bank shares were, overall, trading significantly lower than at the start of the year. Holdings of non-performing loans continue to weigh on banks in several euro-area countries. Although the share of non-performing loans in the EU was reduced from 6.7% to 5.6% within three years, according to the IMF, Italy has a significantly higher level at 18.0%. The current discussions about capital increases, unresolved legal disputes in the United States affecting individual institutions and the persistent low-interest-rate environment are depressing banks' business outlook.

Price uncertainty following the US presidential election declining again

Volatility on the stock markets also reflected recurring phases of uncertainty among market participants. The implied volatilities of many stock price indices, which are calculated from options, rose substantially especially shortly before the British referendum, both within and outside of Europe, and approached or even surpassed their year highs. However, the uncertainty did not prove to be persistent, and subsided just a few weeks after the referendum result was announced. Uncertainty did not pick up significantly again on a global scale until the run-up to the US presidential election on 8 November 2016, but quickly normalised again after the results had been announced.

Equity issuance and acquisition

Domestic enterprises issued €2 billion worth of new shares in the third quarter of 2016, the majority of which were unlisted securities. The volume of foreign equities outstanding in the German market climbed by €9½ billion. German non-banks were virtually the sole net buyers of equity securities (€9½ billion). For-

Major items of the balance of payments

€ billion

Item	2015r Q3	2016r Q2	2016r Q3p
I Current account	+ 65.0	+ 72.1	+ 61.6
1 Goods[1]	+ 67.1	+ 77.1	+ 68.9
2 Services[2]	− 13.9	− 5.0	− 13.0
3 Primary income	+ 18.4	+ 4.5	+ 16.4
4 Secondary income	− 6.6	− 4.5	− 10.7
II Capital account	+ 0.7	+ 1.6	+ 0.4
III Financial account (increase: +)	+ 64.1	+ 58.5	+ 58.4
1 Direct investment	+ 5.1	− 16.9	+ 11.5
Domestic investment abroad	+ 14.1	+ 11.3	+ 19.6
Foreign investment in the reporting country	+ 9.0	+ 28.2	+ 8.1
2 Portfolio investment	+ 45.8	+ 66.5	+ 48.7
Domestic investment in foreign securities	+ 26.5	+ 34.3	+ 19.6
Shares[3]	+ 1.1	+ 4.7	+ 8.1
Investment fund shares[4]	+ 4.6	+ 7.9	+ 8.7
of which Money market fund shares	+ 0.2	− 1.3	− 0.5
Long-term debt securities[5]	+ 26.6	+ 26.4	+ 5.8
of which Denominated in euro[6]	+ 20.5	+ 17.9	− 4.5
Short-term debt securities[7]	− 5.9	− 4.7	− 2.9
Foreign investment in domestic securities	− 19.4	− 32.3	− 29.1
Shares[3]	− 5.2	− 5.7	+ 1.2
Investment fund shares	+ 3.6	− 1.9	− 2.3
Long-term debt securities[5]	− 23.0	− 32.3	− 24.0
of which Issued by the public sector[8]	− 23.1	− 39.5	− 19.9
Short-term debt securities[7]	+ 5.2	+ 7.5	− 4.0
3 Financial derivatives[9]	+ 2.7	+ 3.9	+ 9.8
4 Other investment[10]	+ 11.9	+ 4.1	− 11.4
Monetary financial institutions[11]	+ 18.9	− 30.0	− 30.0
Enterprises and households[12]	− 8.2	− 3.5	+ 14.2
General government	+ 3.2	− 4.2	+ 7.6
Bundesbank	− 2.0	+ 41.9	− 3.2
5 Reserve assets[13]	− 1.5	+ 0.8	− 0.3
IV Errors and omissions[14]	− 1.6	− 15.2	− 3.6

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.

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eign investors and domestic banks expanded their share portfolios by €1 billion and €½ billion respectively.

Sales and purchases of mutual fund shares

During the quarter under review, domestic investment companies recorded inflows of €21 billion, after raising funds totalling €25½ billion in the previous three-month period. The fresh cash mainly accrued to specialised funds reserved for institutional investors (€17½ billion). Among the asset classes, it was primarily bond-based funds which recorded a high total inflow of funds (€7 billion). Mixed securities-based funds and equity-based funds were also able to place new shares in the market (each to the value of €4 billion). Foreign funds distributed in the German market attracted new inflows totalling €8½ billion net in the third quarter of 2016. Domestic non-banks were the main buyers, adding mutual fund shares worth €31½ billion to their portfolios. On balance, their focus was largely on German paper. Domestic credit institutions purchased investment fund shares for €1 billion, while foreign investors sold mutual fund shares worth €2½ billion.

Direct investment

Direct investment sees capital exports

As with cross-border portfolio investment, which saw net outflows totalling €48½ billion in the third quarter of 2016, net capital exports were likewise recorded in the field of direct investment; these amounted to €11½ billion.

German direct investment abroad

In summer 2016, the direct investments of domestic corporations abroad came to a net total of €19½ billion. Domestic investors increased their equity capital by €16½ billion. This was primarily achieved in the form of new cross-border investment (€12½ billion) and reinvested earnings (€10 billion). In addition, German enterprises increased intra-group lending by €3½ billion in the same period. Financial credits were granted, but some trade credits redeemed. Countries which received substantial direct investments from Germany were, among others, the Netherlands (€7 billion), the United States (€4 billion) and Sweden (€3 billion).

Foreign direct investment in Germany

Foreign investors increased their direct investment in Germany from July to September 2016 (€8 billion). This was achieved through an increase in claims from debt instruments, which grew by €4½ billion. Here financial credits in particular were granted. Claims from equity capital also increased in the period under review (€3½ billion), which was primarily driven by reinvested profits. A regional breakdown shows that investors from the following countries upped the value of their direct investment in Germany particularly sharply: Malta (€5 billion), the Netherlands (€4½ billion) and the United States (€2½ billion).