

Financial markets

Financial market setting

Financial markets shaped by economic confidence and monetary policy

In the third quarter of 2017, the international financial markets were mainly shaped by the favourable economic outlook and market participants' monetary policy expectations. Government bond yields initially came under pressure on both sides of the Atlantic as investors firmed their expectation of a continued highly accommodative monetary policy for the euro area and lowered their expectations of interest rate hikes in the United States. Moreover, in the euro area, the Eurosystem's decision to continue the asset purchase programme – at a reduced volume – until at least September 2018 and lower risk premiums on the government bonds of periphery countries led to declining yields, with the GDP-weighted average falling on balance by 16 basis points to 1.0%. In the United States, by contrast, yields in the second half of the quarter were increasingly supported by expectations regarding the planned tax reform. At the same time, following the Fed's announcement that it would reduce its balance sheet, market participants were again more confident that the Fed would pursue a less expansionary monetary policy course. On balance, US yields rose slightly to 2.4%. In the international stock markets, the positive economic outlook was reflected in higher profit expectations, as a result of which prices increased pretty much across the board and new highs were reached temporarily in both Germany and the United States. In the foreign exchange markets, the euro was buoyed by the positive economic data for the euro area. On average, the euro appreciated against the currencies of 19 major trading partners by 1.8%.

Exchange rates

Euro at two-year high against the US dollar in early September, ...

In the period under review, the euro appreciated against the US dollar until the beginning of September, thus continuing the trend which

emerged in June following ECB President Mario Draghi's economic assessment at the Forum on Central Banking in Sintra, which had been perceived as rather confident in the markets. Favourable economic data from the euro area, on the one hand, and waning hopes of economic policy impetus from the US Administration, on the other, gave the euro a boost. In addition, the expectations of rising interest rates in the United States weakened in August, following publication of the minutes of the US Federal Open Market Committee's most recent meeting. At the end of the month, uncertainty about the possible negative consequences for the US economy of two hurricanes depressed the US currency further still. Furthermore, after it was signalled during the press conference on the ECB Governing Council's monetary policy meeting at the beginning of September that decisions on the future of the asset purchase programme would soon be announced, the euro temporarily rose to US\$1.21 on 8 September, which was its highest level since the beginning of 2015.

Subsequently, the mood switched in favour of the US currency, with the US dollar recovering on a broad basis, including against the euro. This was partly due to the fact that markets by then expected the burden on the US economy as a result of the storms to be smaller than previously anticipated and, at the same time, considered it again more likely that there would be a hike in key interest rates in December. From the end of September onwards, investor confidence in the implementability of the US Administration's planned tax reform rose, first after a draft reform was presented and subsequently when the 2018 budget was adopted. This put the euro under downward pressure, as did the flare-up in the conflict over Catalan independence and the attendant uncertainty over political developments in Spain. The euro weakened further at the end of October after the ECB Governing Council decided at its mon-

... but subsequently weaker

etary policy meeting to continue the asset purchases – at a reduced volume – beyond 2017, with the end-date of the purchase programme remaining open. After the publication of figures showing unexpectedly strong German GDP growth, the euro rebounded and was latterly trading at US\$1.18, 3.1% above its level at the end of June.

Euro appreciates against the yen...

The euro fluctuated between ¥128 and ¥131 until the beginning of September, without any clearly discernible trend. On the one hand, the euro was buoyed by the above-mentioned favourable economic data from the euro area and the prospect of the Bank of Japan’s monetary policy stance remaining expansionary, which was fuelled by the renewed postponement of the deadline for meeting the inflation target. On the other hand, the demand for yen as a traditional financing currency for carry trades is likely to have increased during this period due to the unwinding of carry trades in response to the escalation of tensions in the conflict with North Korea. Subsequently, however, a countermovement set in as risk aversion eased again. At the end of the reporting period, the euro stood at ¥133 and was thus 4.2% above its level at the end of June.

... and against the pound sterling

In the period under review, the euro initially appreciated substantially against the pound sterling in the context of the slow-moving negotiations on the announced withdrawal of the United Kingdom from the European Union. At the end of August, it reached its highest level for eight years. However, the mood then reversed in favour of the pound sterling after statements by representatives of the Bank of England fuelled speculation regarding a tighter monetary policy stance. Subsequently, the existing expectations of a rise in interest rates were intensified by the publication of the minutes of the monetary policy meeting of the Bank of England and the unexpectedly favourable retail sales in the United Kingdom, which caused the British pound to appreciate not only against the euro, but against a number of currencies. Then, when the Bank of England did in

Exchange rate of the euro

Daily data, log scale

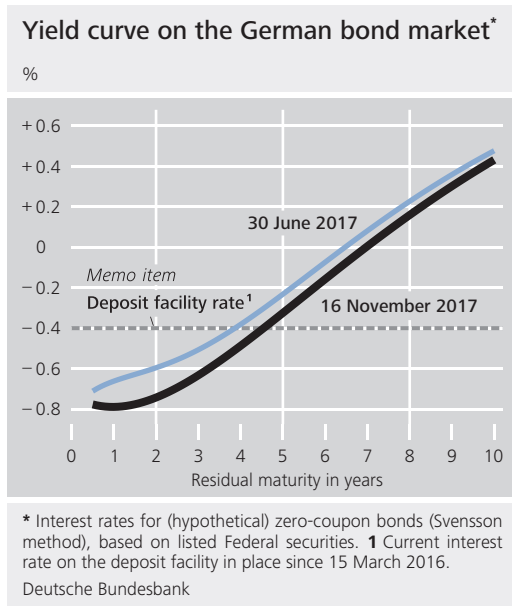


Source: ECB. ¹ Exchange rate at the start of monetary union on 4 January 1999. ² As calculated by the ECB against the currencies of 19 countries.
 Deutsche Bundesbank

fact raise interest rates at the beginning of November, the pound came under downward pressure when the absence of indications of further interest rate rises disappointed investor expectations. As this report went to press, the euro stood at £0.89, up 1.4% on its level at the end of June.

Measured against the currencies of 19 major trading partners, the euro appreciated by 1.8% overall compared with the end of June. The marked appreciation of the euro against the yen and the US dollar was exceeded by its appreciation against the Swiss franc (+6.9%). For a while, the euro was trading at CHF1.17, its

Effective euro exchange rate stronger



beyond the end of the year, with a monthly purchase amount of €30 billion from the beginning of next year until at least September 2018, yields declined again perceptibly. As this report went to press, the yield on ten-year Federal bonds stood at 0.3%, 6 basis points lower than at the end of the previous quarter.

Together with the yields on ten-year Bunds, the entire yield curve derived from yields on Federal securities shifted downwards. As the decline in yields in the short-term maturity spectrum was more pronounced than in the long-term maturity spectrum, the curve also became somewhat steeper. Most recently, yields up to a residual maturity of just under seven years were negative, while yields up to just shy of the five-year maturity category were lower than the deposit facility rate of -0.4%. Yields in the short-term maturity spectrum still seem to be markedly influenced by scarcity premiums, which are likely to reflect, *inter alia*, the advantages of Federal securities in terms of their liquidity and their use in derivative financial instruments.

Downward shift in yield curve

highest level since January 2015. On the other hand, the single currency depreciated against a number of other currencies, including the Czech koruna (-2.4%). The price competitiveness of euro area suppliers deteriorated somewhat as a result of the euro's appreciation, but in terms of the long-term average their competitive position can currently continue to be regarded as neutral.

Securities markets and portfolio transactions

Bond markets shaped by economic confidence and monetary policy

In recent months, bond markets have been driven mainly by the influence of more optimistic expectations regarding economic activity and a reassessment of monetary policy. Yields fell until the beginning of September, when many market participants gradually revised their short-lived expectation, which had arisen towards the end of the second quarter, that a departure from the very expansionary monetary policy in the euro area might be in the offing earlier than previously expected. Investors increasingly withdrew funds from safe-haven investments in light of increased economic confidence and declining risk aversion, buoying yields for a time. However, following the decision of the ECB Governing Council on 26 October to continue the asset purchase programme

Yield spreads between ten-year Federal bonds and government bonds of other euro area countries fell for the most part, with the GDP-weighted average of yield spreads over Bunds narrowing by 10 basis points to 81 basis points. The spreads on Portuguese government bonds fell particularly sharply after a credit rating agency raised Portugal's rating by one notch to investment grade, citing progress in the country's debt situation and economic performance. The spreads on Italian government bonds, which also decreased significantly, were likewise influenced by positive reports on economic growth and by an improved rating. In the period under review, yields on Spanish government bonds were strongly affected by the referendum on Catalan independence and the heightened uncertainty about how this political conflict would play out. In this context, the yield mark-ups on Spanish government bonds rose markedly for a while. However, towards the end of the reporting period, the political uncertainty faded somewhat into the back-

Narrowing of yield spreads in the euro area

ground from the perspective of market participants. As a result, the yield on Spanish government bonds widened slightly.

Slight increase in US yields on balance

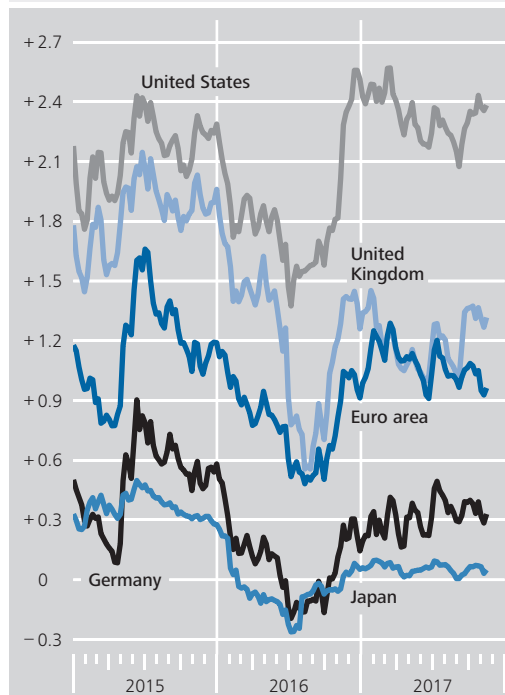
Similarly to European government bonds, US Treasuries also saw declining yields until the beginning of September. On the one hand, market participants initially somewhat lowered their expectations of policy rate hikes in the United States following the publication of the minutes of the Federal Open Market Committee which revealed the discussion it had held on monetary policy. On the other hand, heightened geopolitical tensions such as the North Korea conflict increased demand for safe assets and thus also placed US Treasury yields under pressure. Subsequently, however, yields were increasingly boosted by positive economic reports and the planned US tax reform. This was mainly driven by market participants' expectations that the tax reform would increase the US national debt and at the same time potentially reduce demand for US Treasuries.¹ Furthermore, following the Fed's announcement at the end of September that it would gradually reduce its balance sheet, market participants were again more confident of further policy rate rises. Against this background, US yields rose relatively sharply after having previously moved broadly in line with long-term yields in the euro area. On balance, they recovered from their decline in July and August and rose slightly to 2.4%.

Yields in the United Kingdom and Japan largely unchanged

In the United Kingdom, yield developments were dominated by market participants' expectations about monetary policy and ongoing uncertainty about UK trade links with the EU after Brexit. The Bank of England's decision to raise key interest rates by 25 basis points at the beginning of November, which was the first hike in interest rates in over ten years, had been largely anticipated by investors and is likely to have buoyed yields in advance of the decision. However, yields fell slightly immediately after interest rates were raised, implying that market participants had somewhat lowered their expectations of further interest

Yields* in the euro area and selected countries

% pa, weekly averages



Source: Thomson Reuters. * Government bonds with a residual maturity of ten years.
 Deutsche Bundesbank

rate increases. In addition, the uncertainty associated with the Brexit negotiations continued to put pressure on yields, which were, on balance, virtually unchanged from their level at the end of June. As this report went to press, yields in Japan remained practically unchanged at 0.1%. Yields on Japanese government bonds are still very much being influenced by the Bank of Japan's yield curve control programme, which aims to maintain the yield on ten-year government bonds at close to 0%.

The average market-based inflation expectations for the coming years in the euro area continued to follow a slight upward trajectory across all maturities, particularly for short horizons. The five-year forward inflation rates in

Rise in forward inflation rates

¹ An important element of the planned tax reform is a one-time repatriation tax at a low rate to bring corporate profits invested offshore back to the United States. As, according to market observers, some of these profits have been invested in US Treasuries, such a repatriation of profits could prompt companies to reduce their exposure to US government securities.

Forward inflation rates and expectations in the euro area

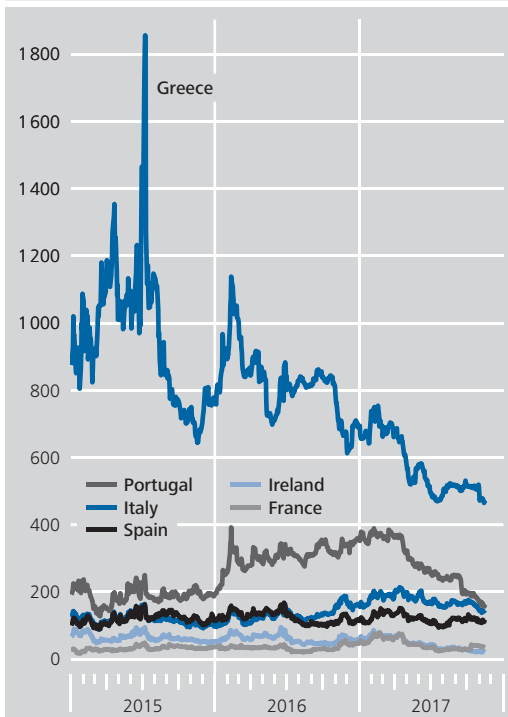


Sources: Thomson Reuters, Consensus Economics and Bundesbank calculations. ¹ Derived from the fixed cash flow arising from inflation swaps which is swapped for the actual annual inflation rates (HICP excluding tobacco) realised over the next five or ten years. Weekly averages.

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Spreads of ten-year government bonds over German Federal bonds

Basis points, daily data



Sources: Thomson Reuters and Bundesbank calculations.

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five years derived from inflation swaps rose relatively moderately by 9 basis points to 1.7%. At the same time, the probability of deflation over the next five years based on options data declined and is currently close to a multi-year low. Unlike the market-based forward inflation rates, the inflation expectations for the euro

area six to ten years ahead, as computed by Consensus Economics on the basis of surveys, remained virtually unchanged of late at 1.9%. When interpreting this discrepancy, it is necessary to bear in mind the possible liquidity and inflation risk premiums that influence market-based measures and reduce their informative value in economic terms.

Yields on BBB-rated European corporate bonds with a maturity of seven to ten years have continued to decrease since the end of June. Bonds issued by non-financial corporations recorded a decline of 21 basis points, delivering a yield of 1.4% as this report went to press. Meanwhile, yields on bonds issued by financial corporations fell by just under ½ percentage point to 1.9%. As in the government bond markets, the fact that many market participants' expectations of a continued highly accommodative monetary policy strengthened over the course of the quarter is likely to have played a role in this development. Up to the beginning of August, the market situation helped to gradually push the yields generated by both corporate sectors back down to their low level recorded in June and, after the last ECB Governing Council meeting, to squeeze them even further. Despite a parallel decline in the yields on government bonds, yield spreads in the corporate sector over safe Federal bonds fell by 37 and 11 basis points respectively for financial and non-financial corporations during the reporting period. Compared with their five-year average, financing conditions for enterprises therefore remain highly favourable.

Decline in yields on corporate bonds

Gross issuance in the German bond market stood at €257½ billion in the third quarter of 2017, putting it slightly below its previous-quarter level (€265 billion). After deducting redemptions and taking account of changes in issuers' holdings of their own bonds, net redemptions of instruments amounted to €22½ billion on balance. Moreover, foreign borrowers placed debt securities worth €13 billion in the German market. The outstanding volume of debt instruments in the German market

Net redemptions in the bond market

therefore decreased by €10 billion in the period under review.

Fall in credit institutions' capital market debt

Domestic credit institutions reduced their capital market debt in the quarter under review by €17½ billion, following net issuance of €8 billion in the second quarter. In particular, they redeemed other bank securities that can be structured flexibly (€14½ billion) but also, to a lesser extent, mortgage Pfandbriefe and public Pfandbriefe (€2 billion in each case).

Net public sector redemptions

The public sector redeemed bonds totalling €8½ billion net in the third quarter. These figures include issues by resolution agencies set up for German banks, which are ascribed to the public sector for statistical purposes. Central government itself principally redeemed ten-year bonds (€8½ billion), but also two-year Federal Treasury notes (Schätze) totalling €3 billion, as well as Treasury discount paper (Bubills) worth €2½ billion. This contrasted with net issuance of five-year Federal notes (Bobls) in the amount of €9 billion and 30-year bonds worth €2½ billion. In the quarter under review, state governments redeemed their own bonds to the tune of €1½ billion in net terms.

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

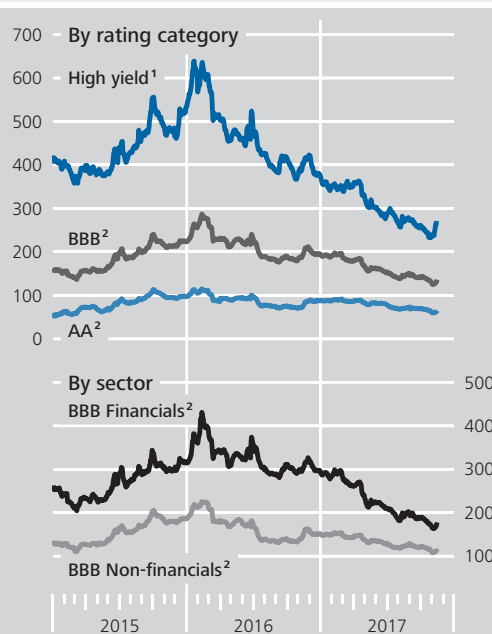
German enterprises took advantage of the favourable financial market conditions and issued debt securities to the value of €3 billion in net terms in the third quarter, solely issuing bonds with a maturity of more than one year, on balance.

Bundesbank chief buyer of debt securities

The Bundesbank was the predominant buyer of debt securities in the German bond market in the third quarter, adding €34½ billion worth of paper to its portfolio, mainly under the Euro-system's asset purchase programmes. Domestic non-banks expanded their bond portfolios by €7 billion, placing a particular emphasis on foreign instruments. By contrast, non-resident investors parted with German debt securities to the tune of €27½ billion net, which, on balance, mainly took the form of bonds issued by the public sector. German credit institutions likewise disposed of interest-bearing paper

Yield spreads of corporate bonds in the euro area*

Basis points, daily data



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

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Investment activity in the German securities markets

€ billion

Item	2016		2017
	Q3	Q2	Q3
Debt securities			
Residents	34.4	31.7	17.6
Credit institutions	-24.2	-13.6	-23.6
of which			
Foreign debt securities	-8.9	0.9	-5.7
Deutsche Bundesbank	48.9	38.4	34.3
Other sectors	9.8	6.9	6.8
of which			
Domestic debt securities	-5.0	-11.3	-14.1
Non-residents	-28.1	-1.0	-27.4
Shares			
Residents	11.9	-1.4	12.8
Credit institutions	0.6	3.1	-3.0
of which			
Domestic shares	0.1	6.7	-0.7
Non-banks	11.3	-4.5	15.8
of which			
Domestic shares	0.4	-3.3	5.1
Non-residents	1.2	-2.2	-2.3
Mutual fund shares			
Investment in specialised funds	17.4	9.3	10.5
Investment in open-end funds	3.8	7.6	8.9
of which			
Equity funds	1.9	1.1	3.6

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(€23½ billion), the vast majority of which was, on balance, domestic bank securities.

Equity market

The positive economic outlook and the expansionary monetary policy stance in the euro area and Japan led to significant gains in the international equity markets in some instances. All in all, the political uncertainty triggered by the North Korea conflict, the ongoing Brexit negotiations and the efforts in Catalonia to secure independence played only a minor, regionally limited role for market participants. Buoyed by

Marked price gains in international equity markets

better than expected quarterly earnings and higher medium-term profit expectations, the US S&P 500 index was up by a total of 6.7%, posting new all-time highs on several occasions during the reporting period. The less expansionary monetary policy stance on the part of the US Federal Reserve that had been anticipated by market participants did not lead to any strong reactions in the equity market. Meanwhile, the appreciation of the Japanese Nikkei 225 by 11.6% was even more pronounced. In addition to the favourable economic outlook, voters' affirmation of the Japanese government in the parliamentary elections, as predicted by most investors, and the prospect of a continued highly expansionary monetary policy stance presumably served to boost prices. The broad Euro Stoxx index was up by 4.1% as this report went to press, while the CDAX rose by as much as 6.9% and, as with the S&P 500, temporarily climbed to a series of new all-time highs. In this context, much like with the other international indices, the European markets initially remained frozen in a relatively long period of sideways movement before then steadily turning upwards from September onwards, resulting in marked price gains. In addition to good corporate figures, the prospect of a continuation of the asset purchase programme in the euro area had a particularly positive impact on prices. Notwithstanding the slow pace of Brexit negotiations and the tightening of monetary policy initiated by the Bank of England, the FTSE All-Share index also went up in the United Kingdom, namely by 1.4%. In Spain, against the backdrop of the troubles in Catalonia, the domestic equity market suffered losses (-3.1%).

The price/earnings ratio, calculated on the basis of analysts' earnings estimates for the next 12 months, currently stands above the relevant five-year averages for both the Euro Stoxx and the S&P 500, pointing to a high valuation. A further indicator that can be used to assess stock market valuation is the implied equity risk premium, which is derived from a dividend dis-

Valuations up on both sides of the Atlantic

count model.² The size of this surcharge, demanded by investors for a risky investment in comparison to a safe investment, hardly changed in the period under review and remains close to the respective averages for the past five years both for the S&P500 and the Euro Stoxx. Hence, this figure does not, in the first instance, suggest any immediate overvaluation. In contrast to the price/earnings ratio, the risk premium is, however, a relative measure that considers alternative investment forms in the currently very low interest rate environment, which may itself be unsustainable. If one compares the two currency areas, it is noticeable that both of these indicators signal a higher valuation for the US stock market in each case.

Bank shares weaker than those of the market as a whole

During the reporting period, bank shares underperformed the respective broad aggregate indices on both sides of the Atlantic. US banks recorded price gains of 5.1% on average, whereas euro area bank shares saw only a moderate increase in value (up by 0.5%). While Portuguese bank securities experienced a sharp increase in prices, Greek bank shares, in particular, recorded significant losses in the period under review. Following considerable volatility because of the uncertainty arising from the conflict in Catalonia, Spanish bank shares likewise recorded net losses, roughly comparable to those in the Spanish market as a whole.

Equity issuance and acquisition

Domestic enterprises issued €2 billion worth of new shares in the third quarter of 2017, the majority of which were listed securities. The volume of foreign equities outstanding in the German market rose by €8½ billion. On balance, equities were acquired exclusively by domestic non-banks (€16 billion). German credit institutions and foreign investors trimmed their share portfolios by €3 billion and €2½ billion respectively.

² See Deutsche Bundesbank, Stock market valuations – theoretical basics and enhancing the metrics, Monthly Report, April 2016, pp 15-29.

Major items of the balance of payments

€ billion

Item	2016		2017
	Q3	Q2	Q3P
I Current account	+ 58.2	+ 55.2	+ 63.0
1 Goods ¹	+ 67.0	+ 67.4	+ 68.5
2 Services ²	- 11.7	- 4.0	- 11.1
3 Primary income	+ 13.5	+ 4.7	+ 16.4
4 Secondary income	- 10.6	- 12.8	- 11.0
II Capital account	+ 0.2	0.0	+ 0.4
III Financial account (increase: +)	+ 61.5	+ 64.7	+ 52.5
1 Direct investment	+ 7.6	+ 16.8	- 0.8
Domestic investment			
abroad	+ 14.7	+ 22.7	+ 21.4
Foreign investment in the reporting country	+ 7.1	+ 5.9	+ 22.2
2 Portfolio investment	+ 48.4	+ 25.0	+ 58.2
Domestic investment in foreign securities	+ 19.3	+ 20.5	+ 29.2
Shares ³	+ 8.0	- 2.4	+ 5.2
Investment fund shares ⁴	+ 8.9	+ 4.4	+ 11.0
of which			
Money market fund shares	- 0.5	- 4.4	+ 0.6
Long-term debt securities ⁵	+ 5.2	+ 19.5	+ 14.7
of which			
Denominated in euro ⁶	- 4.4	+ 13.4	+ 5.2
Short-term debt securities ⁷	- 2.8	- 1.0	- 1.8
Foreign investment in domestic securities	- 29.1	- 4.6	- 29.0
Shares ³	+ 1.2	- 2.2	- 2.3
Investment fund shares	- 2.2	- 1.3	+ 0.7
Long-term debt securities ⁵	- 24.1	+ 0.8	- 21.8
of which			
Issued by the public sector ⁸	- 20.1	- 2.2	- 18.9
Short-term debt securities ⁷	- 4.0	- 1.8	- 5.6
3 Financial derivatives ⁹	+ 10.5	+ 2.4	+ 1.4
4 Other investment ¹⁰	- 4.8	+ 20.2	- 6.5
Monetary financial institutions ¹¹	- 30.4	- 7.7	- 12.5
Enterprises and households ¹²	+ 14.1	+ 4.4	- 3.4
General government	+ 7.9	- 2.0	- 8.3
Bundesbank	+ 3.5	+ 25.6	+ 17.7
5 Reserve assets	- 0.3	+ 0.4	+ 0.2
IV Errors and omissions ¹³	+ 3.1	+ 9.5	- 10.9

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 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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Sales and purchases of mutual fund shares

During the quarter under review, domestic investment companies recorded inflows of €19½ billion, after raising funds totalling €17 billion in the previous three-month period. These inflows were mainly channelled to specialised funds reserved for institutional investors (€10½ billion). Among the asset classes, mixed securities-based funds attracted the most inflows (€11 billion). Equity funds and open-end real estate funds also placed new shares in the market (€5½ billion and €2 billion respectively). Foreign funds distributed in the German market attracted inflows of €11 billion net in the third quarter of 2017. Domestic non-banks were the main buyers, adding mutual fund shares worth €28½ billion to their portfolios. Domestic credit institutions and foreign investors purchased mutual fund shares worth €1 billion and €½ billion respectively.

■ Direct investment

Direct investment sees capital imports

In contrast to cross-border portfolio investment, which saw net outflows to the tune of €58 billion in the third quarter of 2017, direct investment generated net capital imports of €1 billion.

Foreign investors stepped up their direct investment in Germany between July and September 2017 by €22 billion, doing so by expanding their intra-group lending (€16½ billion) and building up equity capital (€5½ billion). In regional terms, German enterprises saw sizeable inflows of funds from the Netherlands (€6½ billion), Switzerland (€3 billion) and Ireland (€2½ billion). By contrast, investors from the United States withdrew €½ billion worth of funds from Germany.

Foreign direct investment in Germany

Direct investment abroad by German enterprises amounted to €21½ billion net in the third quarter of 2017. Domestic investors boosted their equity capital by a total of €17½ billion. On the one hand, this was achieved in the form of equity capital in the narrower sense (€8½ billion), but also through reinvested earnings (€9 billion). Moreover, German enterprises expanded their intra-group lending (€3½ billion), first and foremost by granting trade credits. Countries receiving substantial direct investment from Germany in the third quarter of 2017 included the Netherlands (€7 billion), the United States (€3½ billion) and Luxembourg (€3 billion). By contrast, France and Brazil saw net withdrawals of funds (€1½ billion in each case).

German direct investment abroad