Financial markets

Financial market setting

Financial markets mainly influenced by monetary policy

Developments in global financial markets in the third and fourth quarters of 2019 have played out against the backdrop of shifting assessments of political risk as well as accommodative monetary policy decisions by central banks on both sides of the Atlantic. On balance, these factors drove down government bond yields for the most part amid some volatility. The drop in yields was fairly heavy in the United States, where the Federal Reserve lowered the interest rate corridor by a total of 0.75 percentage point in three stages during the reporting period. Yields on ten-year Federal bonds (Bunds) also dropped significantly at times, briefly touching all-time lows before bouncing back subsequently. Yield spreads of ten-year government bonds issued by other euro area countries over matched-maturity Bunds narrowed distinctly in some cases, especially in the case of Italian and Greek government paper. The brisk demand for fixed-income securities also provided tailwinds for European corporate bonds, whose yields fell strongly. In global equity markets, these lower yields combined with an increased investor appetite for risk and receding volatility pushed prices up considerably. Following downward revisions of analysts' earnings expectations in the reporting period, US firms in particular exceeded profit forecasts for the most part in the recently closed third quarter. In foreign exchange markets, the euro was slightly down on the end of June on balance when measured as a weighted average against the currencies of 19 major trading partners. The single currency's above-average losses against the US dollar, yen and pound sterling were offset to a degree by gains against a number of European currencies.

Exchange rates

Euro down against the US dollar, …

On balance, the euro has lost ground against the US dollar since the end of the first half of the year. Fading expectations that the Fed would lower policy rates bolstered the US currency in mid-August 2019. Market participants were still expecting another rate cut by the Fed in September, but their reading of the minutes from the FOMC's most recent meeting was that later policy rate cuts had become less likely. Fed Chair Jerome Powell's widely regarded speech in Jackson Hole likewise contained none of the hints that some market players had been hoping for that a protracted cycle of rate cuts was in the offing. In the euro area, meanwhile, some members of the ECB's Governing Council were explicitly calling for an extensive easing of monetary policy in the Eurosystem, which weighed on the euro. The announcement of stronger-than-expected declines in German GDP growth for the second quarter and in the Ifo business climate index provided further headwinds for the single currency. Towards the end of August, political uncertainty in Italy, triggered by the collapse of the country's coalition government, sent the euro lower still.

In September, the euro fluctuated within a relatively narrow range of between US$1.09 and US$1.11, without any clearly discernible trend. The package of measures adopted by the ECB Governing Council to loosen monetary policy did not have a lasting effect on exchange rate developments. But following publication of lower-than-expected German inflation numbers, the euro slipped to just under US$1.09 as the month drew to a close, the lowest it has been since May 2017. Sentiment turned in the euro's favour in early October as a raft of surprisingly weak US economic data were released. After that, growing hopes that the United Kingdom and European Union might be able to agree on the UK's orderly withdrawal

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. An increase indicates an appreciation of the euro.
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from the EU shored up the euro, including against the US dollar. While the policy rate cut agreed at the FOMC's October meeting had been widely expected by markets, the Fed's indication that it would be pausing its monetary easing campaign put the euro under pressure for a time. As this report went to press, the euro was trading at US$1.10, 3.4% down on its level at the end of June 2019.

… the Japanese yen, …

The euro depreciated against the yen in the second half of August, propelled by largely the same factors on the European side as those driving the single currency's performance against the US dollar. In addition, as a result of an easing of the trade dispute between the United States and China, global risk aversion among market participants fell in the second week of September. Declines in global risk aversion tend to trigger net capital outflows out of Japan, weakening the country's currency. This backdrop helped the euro to bounce back distinctly against the yen. The single currency did lose ground against the yen for a time during the second half of the month, when the Bank of Japan (unlike the ECB and Fed before it) decided not to loosen its monetary policy stance any further. But in October, hopes of an orderly Brexit sent the euro higher again, just as they boosted the single currency's performance against the US dollar. As this report went to press, the euro stood at ¥119, which was 2.5% lower than at the end of the second quarter.

… and particularly against the pound sterling

The euro's movements against the pound sterling during the reporting period were largely determined by how likely different market players saw the prospect of the United Kingdom leaving the EU without a deal at the end of October. Peaking at a two-year high of £0.92 in mid-August, the euro fell back significantly until the middle of September, when the risk of a no-deal Brexit declined noticeably after the UK government lost its parliamentary majority, an early general election was rejected, and legislation preventing such a disorderly Brexit was passed. In addition, better-than-expected retail sales and GDP numbers were reported in the UK. A brief countermovement ensued when debate over a disorderly Brexit flared up in the House of Commons, spooking markets again that the United Kingdom was set to withdraw from the EU without a deal on 31 October. Against the odds, though, fresh hopes emerged on 10 October that UK and EU negotiators might yet be able to hammer out a new withdrawal agreement at short notice. Within the space of a day, this news wiped 2.9% off the euro's value (in terms of euro reference exchange rates), the heaviest single-day loss the single currency had ever sustained against the pound sterling. As it became in-

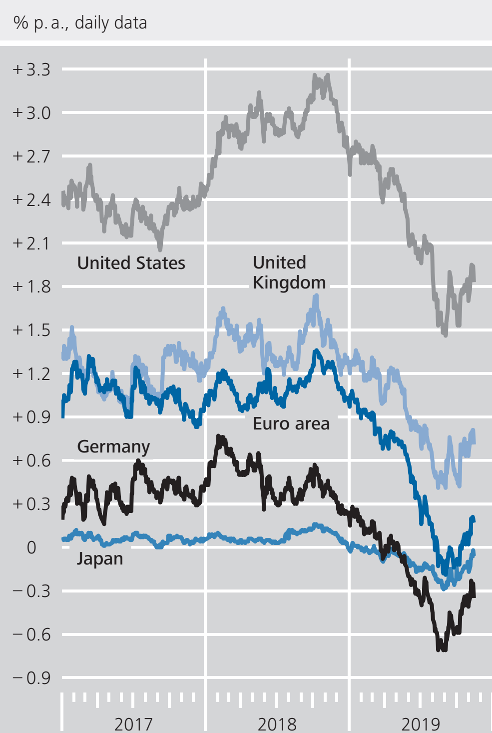
creasingly clear during the following week that the EU and the UK would indeed strike a deal, the euro continued to depreciate against the UK currency. Calm returned to the EUR/GBP exchange rate when the UK's withdrawal from the European Union was postponed once again. At the close of the reporting period, the euro was trading at £0.86, which was around 4.5% lower than at the end of June.

Euro weaker in effective terms as well

Measured as a weighted average against the currencies of 19 major trading partners, the euro has lost 1.6% of its value overall since the beginning of the third quarter. Considering the euro's disproportionately heavy losses against the US dollar, yen and pound sterling, this was a relatively moderate decline in effective terms, thanks in part to the single currency's gains against the Polish zloty (+1%), Swedish krona (+1.2%) and Norwegian krone (+4.4%). Indeed, the euro briefly reached an all-time high against the latter Scandinavian currency. The real effective euro exchange rate – i.e. after taking into account the inflation differentials between the euro area and its major trading partners – likewise declined somewhat during the period under review. Making allowances for estimation uncertainty, the price competitiveness of euro area suppliers can currently be regarded as neutral.

Bond yields* in the euro area and selected countries

% p.a., daily data



Source: Bloomberg. * Government bonds with a residual maturity of ten years.
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Securities markets and portfolio investment

Bond market

Yields down on both sides of Atlantic

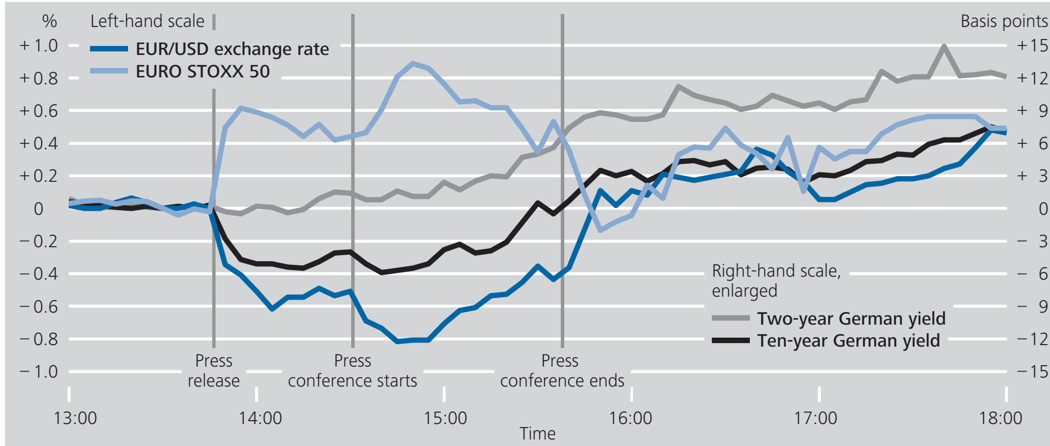
From the end of June 2019, government bond yields largely fell on balance in the major currency areas. In the United States, yields on ten-year US Treasuries retreated by 19 basis points to 1.8%, mainly because of lower term premia calculated from yield curve models. This might be indicative of reduced investor uncertainty over the future path of interest rates, after the Fed lowered the target corridor for the Federal Funds Rate as expected in multiple steps. On the other hand, estimates suggest that market expectations for short-term rates on average for the next ten years picked up slightly. The Fed noted at its meeting in late October that the latest cut in rates provides some insurance against ongoing risks, adding that it considers the current monetary policy stance appropriate and presently sees no need for any further cuts as long as economic conditions do not change substantially. In light of this, the fed funds futures market placed a low probability on another interest rate move before the end of this year.

10-year Bund yield slightly lower on balance

The yield on ten-year Federal bonds (Bunds) has fallen slightly amid substantial volatility since the end of June, closing the reporting period 2 basis points lower overall at -0.35%. Already back in negative territory since March, ten-year Bund yields continued to trend downwards in the third quarter, reaching a new all-time low of -0.75% in September. This decline was probably fuelled primarily by concerns that economic activity might weaken further and

Financial market response to the ECB Governing Council's decisions of 12 September 2019

Change relative to the status at 13:30



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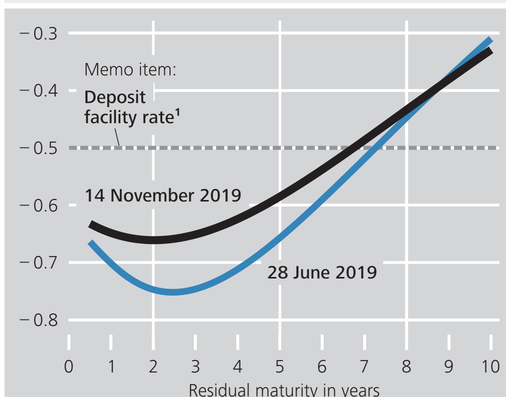
that the trade conflict between the United States and China could flare up. Market expectations of a fresh round of monetary policy easing by the Eurosystem are also likely to have been behind the drop in yields. At its September meeting, the ECB Governing Council did indeed adopt a package of measures which include a 10-basis-point cut in the deposit facility rate as well as the resumption of net asset purchases as part of the expanded asset purchase programme (APP) at a monthly pace of €20 billion as from 1 November. This decision immediately sent ten-year Bund yields lower as the day progressed and higher again after that. Evidently, some market players had been expecting the policy decisions to be more expansionary still. Starting in mid-October, yields on ten-year Bunds increased again quite substantially, mainly in response to signs that the trade conflict was easing and the decisions surrounding Brexit. On balance, the yield spread between ten-year US Treasuries and their German counterparts narrowed by 17 basis points to 218 basis points.

German yield curve still very flat

As this report went to press, the term structure computed from yields on Federal securities was flatter than at the end of the second quarter. The spread between ten-year and two-year yields came to 33 basis points in mid-November, meaning that the term structure was flatter for a time than it had been for more than a decade. Bonds with residual maturities of three years and more all touched record lows during the reporting period, with yields on 30-year Federal bonds also drifting into negative territory for the first time ever. Lower term premia also had a bearing on yield developments in Germany. Market uncertainty surrounding the future path of interest rates appears to have abated in the wake of September's monetary policy decisions. The implicit short-term interest rate expectations contained in the Bund term structure for the average of the next ten years, on the other hand, have increased slightly since

Yield curve in the German bond market*

% p.a.



* Interest rates for (hypothetical) zero coupon bonds (Svensson method), based on listed Federal securities. **1** Current interest rate on the deposit facility in place since 18 September 2019.

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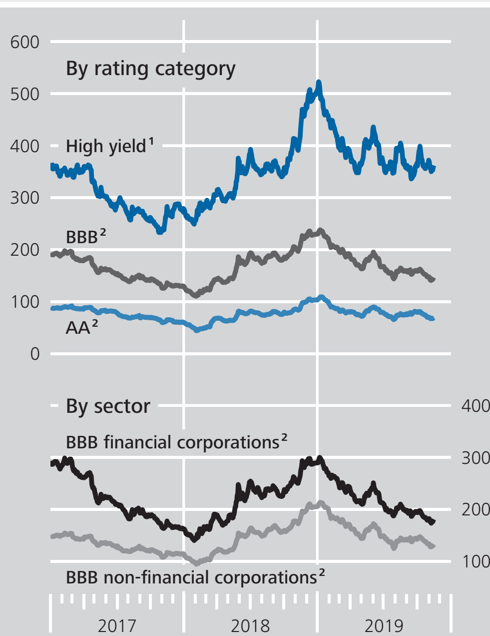
the end of June, suggesting that some market participants had been expecting a higher degree of accommodation.

Yield spreads over Bunds down sharply

The yield spread between ten-year Bunds and ten-year government bonds of other euro area countries (GDP-weighted average) narrowed distinctly compared to the end of June (down 20 basis points at 73 basis points). Spreads tightened particularly sharply for ten-year bonds from Greece and Italy, whose premia over ten-year German paper both declined by more than 70 basis points in the period under review. There are probably two reasons for this. The first is fiscal developments in both countries. Italy's draft budget assuaged fears by not aiming to increase the deficit ratio. Greece, meanwhile, benefited from higher-than-expected tax revenue and an upgrade in its sovereign rating by one rating agency. The second reason is that both countries are likely to have been attractive to investors in search of yield, given that the interest on less risky bonds of other euro area countries is low.

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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Yields down in the UK, up in Japan

Compared to the end of June, yields on ten-year UK bonds (gilts) were down by 12 basis points at 0.7%. The Bank of England left its monetary policy stance on hold at its September meeting and also stressed that a rate cut in the near future had become more likely, citing the uncertainty surrounding Brexit as well as the trade dispute between China and the United States. In Japan, meanwhile, ten-year government bonds were yielding -0.1% at last count, 10 basis points more than at the end of June. Yields thus remained within the broader corridor specified by the Bank of Japan as part of its yield curve control programme. At its meeting at the end of October, it expanded its monetary policy outlook to include the possibility of an interest rate cut, thereby adjusting its forward guidance slightly.

Euro area forward inflation rate down, survey-based inflation expectations up slightly

Five-year forward inflation rates five years ahead for the euro area came to 1.2% as this report went to press. However, the period under review saw market expectations for forward inflation rates fluctuate quite strongly, which will have been mainly due to shifting outlooks for the economy and expectations of monetary policy easing. In early October, the five-year forward inflation rate briefly touched a new all-time low of 1.1%. However, this indicator gives a distorted view of the level of long-term inflation expectations, since it currently also includes negative liquidity and inflation risk premia. These risk premia are the reason for the gap between market-based indicators and the higher inflation expectations computed from surveys. Long-term euro area inflation expectations collated by Consensus Economics, on the other hand, rose slightly to 1.9%.

Corporate bond yields down

Yields on European corporate bonds declined further during the period under review. Bonds issued by BBB-rated financial corporations with a residual maturity of between seven and ten years were yielding 1.4% as this report went to press, 30 basis points less than at the end of June. Yields on non-financial corporate bonds

Investment activity in the German securities markets

€ billion

Item	2018 Q3	2019 Q2	2019 Q3
Debt securities			
Residents	42.2	24.9	23.8
Credit institutions	0.5	5.8	10.6
of which:			
Foreign debt securities	8.9	7.7	11.2
Deutsche Bundesbank	18.0	3.6	– 3.1
Other sectors	23.7	15.5	16.3
of which:			
Domestic debt securities	12.5	5.7	14.8
Non-residents	– 10.0	13.7	5.4
Shares			
Residents	9.0	12.5	6.6
Credit institutions	– 2.1	0.5	– 3.4
of which:			
Domestic shares	0.0	0.4	– 0.4
Non-banks	11.1	12.0	9.9
of which:			
Domestic shares	0.7	2.7	– 0.6
Non-residents	0.3	– 1.4	1.2
Mutual fund shares			
Investment in specialised funds	16.1	12.8	20.7
Investment in retail funds	3.6	4.7	4.3
of which:			
Equity funds	0.6	– 0.6	– 0.8

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of equivalent maturity fell by 15 basis points to 0.9%. With risk-free interest rates only marginally lower, corporate bond spreads over Bunds tightened on roughly the same scale, leaving them far below their respective five-year averages at last count. Furthermore, as spreads receded, so, too, did CDS spreads and equity market uncertainty. Altogether, this can be read as suggesting that market participants' risk aversion has eased overall.

Net issuance in the bond market

Gross issuance in the German bond market stood at €356 billion in the third quarter of 2019 and was therefore above its previous-quarter level (€324 billion). After deducting redemptions and taking account of changes in issuers' holdings of their own bonds, net issuance of bonds came to €18½ billion. Moreover, foreign borrowers placed debt securities worth €11 billion in the German market. The outstanding volume of debt instruments in the German market therefore rose by €29 billion in the period under review.

Rise in public sector capital market debt

The public sector issued bonds totalling €16 billion net in the July to September period. This figure also includes issues by resolution agencies set up for German banks, which are ascribed to the public sector for statistical purposes. In the quarter under review, state governments in particular issued their own bonds on balance, to the value of €11½ billion. The Federal Government itself primarily issued five-year Federal notes (Bobls; €11 billion), but also issued 30-year Federal bonds (Bunds; €4 billion) and Treasury discount paper (Bubills; €3 billion). This contrasted with net redemptions of ten-year Bunds totalling €11 billion.

Net issuance of corporate bonds

In the quarter under review, domestic enterprises issued debt securities worth a net €5½ billion, following strong net issuance amounting to €15 billion in the previous quarter. Non-financial corporations were the primary issuers here and placed almost exclusively long-term securities in the market on balance.

Net redemptions by credit institutions

Domestic credit institutions reduced their capital market debt by €3½ billion between July and September, following net issuance of €11 billion in the previous quarter. The focus of their redemption activity lay on other bank debt securities that can be structured flexibly and mortgage Pfandbriefe (€4½ billion and €1½ billion, respectively). Specialised credit institutions, meanwhile, issued debt securities totalling €1½ billion net.

Domestic non-banks and credit institutions main buyers of debt securities

In the third quarter, German non-banks were the main buyers in the domestic bond market, adding paper worth a net €16½ billion to their portfolios. Domestic securities issued by the public sector were the focus of buyer interest. Domestic credit institutions increased their bond holdings by €10½ billion, acquiring exclusively foreign bonds on balance. Non-resident investors added German debt securities totalling €5½ billion net to their portfolios. On balance, this was almost all in the form of securities issued by the private sector. The Bundesbank was alone in scaling back its portfolio, shedding €3 billion for operational reasons.

Equity market

Stock markets benefited from looser monetary policy and receding political uncertainty

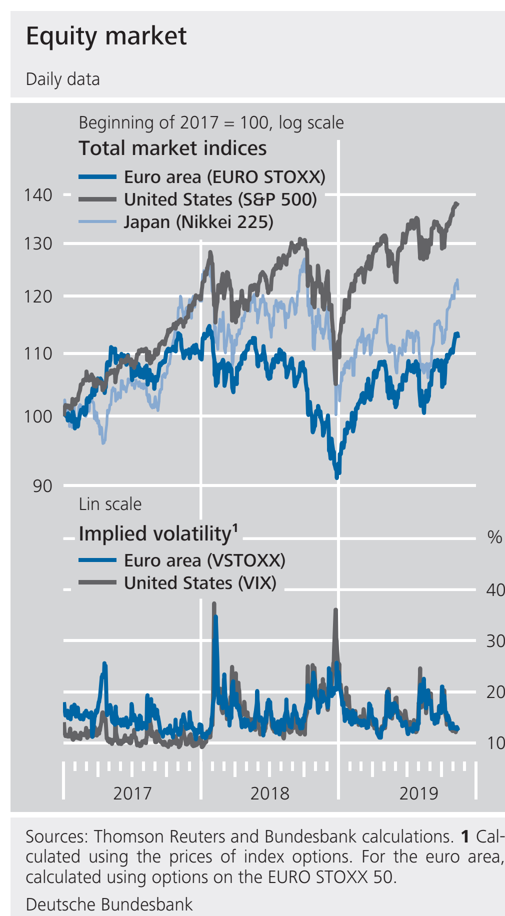
There was a significant increase in equity prices worldwide in the period under review. On balance, the US S&P 500 saw a 5.3% rise on its end-June level. At 8.8%, the climb recorded by the Japanese Nikkei was even more substantial, though still failed to compensate for the first half of the year's poorer performance in comparison to the other major international indices. The European EURO STOXX rose by 5.8%; Germany's CDAX recorded a slightly higher increase of 6.0%. By contrast, the UK equity market saw significantly weaker performance, with the FTSE All-Share index recording a slight loss of 0.9%. Equity prices were boosted by the accommodative monetary policy on both sides of the Atlantic.[1] However, the economic impulses observed in the markets over the period under review did not add up to a clear picture on either side of the Atlantic. Most recently, prices were being bolstered by the positive start to the US budget season as well as a better than expected US labour market report. Further tailwinds came from signals of a more relaxed situation with respect to the trade conflict between the United States and China and in terms of Brexit. The lower equity risk premia for the S&P 500 and the EURO STOXX, as determined using a dividend discount model, reflected this reduced degree of political uncertainty that pushed up equity prices. In the models, a greater appetite for risk on the part of investors and the falling interest rate level over the course of the period under review more than made up for the downward revision of profit expectations. This meant a rise in the calculated valuation levels, though these are still close to their five-year averages both in the case of the S&P 500 and the EURO STOXX.

Varying performance for bank shares

On the back of strong quarterly results, bank shares in the United States rose by a considerable 11.2%. European bank shares also outperformed the European market as a whole (+5.6%). Stock in UK banks, meanwhile, experienced a significant fall in value during the period under review (-5.7%). A key factor here is likely to have been the negative impact on the UK financial industry of the country's impending withdrawal from the EU, which remains hard to gauge at this point.

Equity market

Daily data



Sources: Thomson Reuters and Bundesbank calculations. **1** Calculated using the prices of index options. For the euro area, calculated using options on the EURO STOXX 50.
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Volatility at a low level of late

Market participants' uncertainty concerning future price developments – as measured by the implied volatility of equity indices calculated on the basis of options – had initially surged at the end of July when the trade conflict between the United States and China temporarily intensified. It subsequently receded on a continuous basis, and at the end of the period under review was back at the low levels seen before the aforementioned rise. This meant that it lay well below the five-year averages overall.

1 In response to the press release concerning the ECB Governing Council's monetary policy decisions on 12 September 2019, the EURO STOXX 50 posted immediate gains; these cooled somewhat once the press conference was over. By 18:00, the price effect amounted to +0.5% (see the chart on p. 40).

Major items of the balance of payments

€ billion

Item	2018r Q3	2019 Q2	2019 Q3p
I. Current account	+ 48.0	+ 59.9	+ 64.1
1. Goods[1]	+ 47.6	+ 58.4	+ 63.0
2. Services[2]	− 13.1	− 3.7	− 13.7
3. Primary income	+ 25.3	+ 11.4	+ 27.0
4. Secondary income	− 11.8	− 6.2	− 12.2
II. Capital account	− 1.0	− 0.5	+ 0.5
III. Financial account (increase: +)	+ 39.8	+ 49.3	+ 18.6
1. Direct investment	+ 6.7	+ 4.0	− 6.5
Domestic investment abroad	+ 24.5	+ 30.5	+ 24.7
Foreign investment in the reporting country	+ 17.9	+ 26.5	+ 31.1
2. Portfolio investment	+ 39.9	+ 16.5	+ 15.6
Domestic investment in foreign securities	+ 28.0	+ 27.8	+ 20.9
Shares[3]	+ 3.9	+ 2.9	− 0.7
Investment fund shares[4]	+ 4.0	+ 8.3	+ 10.8
of which: Money market fund shares	− 1.7	+ 2.2	− 0.4
Long-term debt securities[5]	+ 20.8	+ 17.0	+ 13.6
of which: Denominated in euro[6]	+ 18.6	+ 13.7	+ 8.0
Short-term debt securities[7]	− 0.7	− 0.4	− 2.8
Foreign investment in domestic securities	− 12.0	+ 11.4	+ 5.3
Shares[3]	− 1.6	− 1.4	+ 1.2
Investment fund shares	− 0.3	− 0.9	− 1.2
Long-term debt securities[5]	− 13.9	+ 20.5	− 2.7
of which: Issued by the public sector[8]	− 7.9	+ 1.3	− 7.4
Short-term debt securities[7]	+ 3.8	− 6.7	+ 8.0
3. Financial derivatives[9]	+ 10.7	+ 11.2	+ 3.5
4. Other investment[10]	− 16.9	+ 17.1	+ 6.3
Monetary financial institutions[11]	− 7.3	− 0.4	+ 9.3
Enterprises and households[12]	+ 2.0	− 6.2	+ 8.0
General government	− 8.1	+ 0.2	+ 1.3
Bundesbank	− 3.5	+ 23.5	− 12.2
5. Reserve assets	− 0.5	+ 0.4	− 0.3
IV. Errors and omissions[13]	− 7.1	− 10.1	− 46.0

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 Deutsche 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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Equity issuance and acquisition

Domestic enterprises issued €½ billion worth of new shares in the third quarter of 2019, the majority of which were unlisted securities. The volume of foreign equities outstanding in the German market rose by €7½ billion. On balance, equities were acquired predominantly by domestic non-banks (€10 billion). Foreign investors purchased equities for €1 billion in net terms, while domestic credit institutions scaled back their equity holdings by €3½ billion.

Investment funds

Sales and purchases of mutual fund shares

During the quarter under review, domestic investment companies recorded inflows of €25 billion, after raising funds totalling €17½ billion in the previous three-month period. The fresh funds mainly accrued to specialised funds reserved for institutional investors (€20½ billion). Among the various asset classes, mixed securities funds, in particular, attracted large inflows (€15 billion). Open-end real estate funds and funds of funds also placed new shares in the market (€5 billion and €2½ billion, respectively). Foreign funds operating in the German market attracted inflows totalling €11 billion net in the third quarter. Domestic non-banks were the main buyers, adding mutual fund shares worth €35 billion to their portfolios. Their focus was predominantly on German paper. Domestic credit institutions purchased mutual fund shares worth a net €2 billion, while foreign investors scaled back their investment in German funds by a net €1 billion.

Direct investment

Direct investment sees capital imports

While transactions in cross-border portfolio investment in the third quarter of 2019 resulted in net capital exports of €15½ billion, direct investment brought inflows of €6½ billion on balance.

Rise in inward direct investment in Germany

In the period from July to September 2019, foreign direct investment in Germany came to a net €31 billion, compared to €26½ billion in

the previous quarter. At €25½ billion, most of this was in the form of intra-group loans, with funds predominantly being provided as financial credits, on balance. Almost half of these constituted reverse investments, whereby foreign affiliates grant credits to their German parent companies. This is a typical way for them to pass on proceeds from securities issuance. Foreign enterprises increased their equity capital in Germany by €6 billion in the third quarter, mainly through reinvested earnings. The third quarter saw comparably high inward FDI flows coming from Luxembourg (€10½ billion), the United Kingdom (€9½ billion) and the United States (€5½ billion), in particular.

Capital outflows as a result of transactions by domestic enterprises

Firms domiciled in Germany increased their direct investment abroad by €24½ billion between July and September (compared with €30½ billion in the previous quarter). They primarily boosted their equity capital abroad (€22½ billion), the lion's share of which was accounted for by reinvested earnings. Furthermore, they also granted more loans to affiliated enterprises abroad on balance (€2½ billion). This lending came in the shape of financial credits, while there was a reduction in the volume of trade credits. German enterprises invested in a number of countries and regions throughout the world. The period from July to September 2019 saw particularly high levels of investment in the United States and Luxembourg (at roughly €5½ billion in each case) as well as the United Kingdom (€4½ billion), Switzerland (€3 billion) and Sweden (€2½ billion).