

## ■ Financial markets

### ■ Financial market setting

*Financial markets shaped by monetary policy and trade conflicts*

Events on the international financial markets in the second and third quarters of 2019 were heavily shaped by the monetary policy of major central banks and more recently by the resurgence of the trade dispute between the United States and China. Above all, the Eurosystem's communication of monetary policy, which is perceived to be accommodative, and the Federal Reserve System's policy rate cut at the end of July played a part in falling capital market rates around the world. Added to this were concerns about a cooldown in world trade and global economic activity, which recently led to increased demand for government bonds. This saw, amongst other things, yields on Federal bonds (Bunds) fall to historic lows. No broad-based "flight to safety" was observed, however, as both the interest rate spread of euro area government bonds and the yield spreads of European corporate bonds over Bunds narrowed.

On the stock markets, the intensified trade dispute led to significant price falls at the beginning of August. These undid, in many places in full, the price gains previously recorded since the end of March. At the same time, uncertainty about future stock market developments rose sharply. On the foreign exchange markets, the pound sterling depreciated distinctly against the backdrop of the government reshuffle in the United Kingdom and the attendant growing concerns about Brexit. The Chinese renminbi also became a focus for market monitors after temporarily dropping to a multi-year low against the US dollar. On a weighted average against the currencies of 19 major trading partners, the euro gained around 2%, however.

### ■ Exchange rates

As in the first quarter of 2019, the EUR/USD exchange rate continued to fluctuate to a relatively minor extent as the year progressed. In May, it hovered within a narrow corridor around a rate of US\$1.12. Neither unexpected economic data nor political events such as the European parliamentary elections led to any lasting exchange rate changes. The market saw more movement in June, however. An intensification of the trade dispute between China and the United States plus unexpectedly weak US labour market figures resulted in broad-based weakness for the US dollar during the first half of June. Moreover, the euro was bolstered by the monetary policy communication around the June meeting of the ECB's Governing Council, which was felt by financial market actors to be less accommodative than expected. A temporary countermovement was observed in the middle of the month, as expectations of an interest rate cut in the United States were dampened by strong retail and industry figures and, in a speech in Sintra, ECB President Draghi floated the prospect of a more expansionary monetary policy stance should the economic conditions in the euro area fail to improve. With the Fed likewise communicating a potential loosening of its monetary policy following its monetary policy meeting, the US dollar later went on to face renewed pressure from the US central bank, in particular. As a result, the euro traded at US\$1.14 for a time.

*Euro slightly down against US dollar*

On the back of the resumption of negotiations between the United States and China plus robust US labour market figures, the mood on the foreign exchange markets turned against the euro in July. Furthermore, over the remainder of the month, the still subdued economic outlook in the euro area as a whole weighed on the single currency. The US dollar received an additional boost after representatives of the US Congress and the government reached

## Noteworthy fluctuations in euro exchange rates following the ECB Governing Council's monetary policy meeting in July 2019

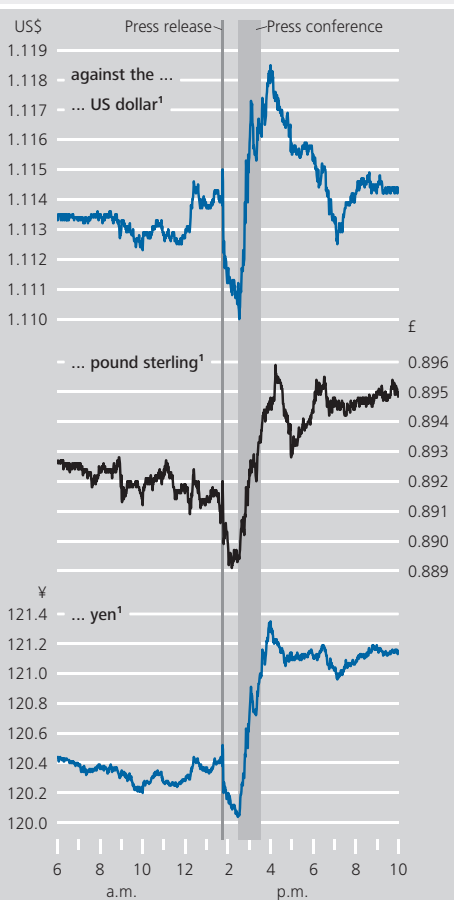
Intraday movements of exchange rates and other financial market variables are often useful when assessing the quantitative effect of individual announcements or publications ("events").<sup>1</sup> The monetary policy communication after the ECB Governing Council's meeting on 25 July 2019 is an interesting case in point.<sup>2</sup> The first communication took place – as usual – at 1:45 p.m. in the form of a press release, informing the general public of the main decisions taken by the Governing Council. Within a few minutes, the euro depreciated in net terms against the US dollar, pound sterling and the yen, for example. Contrary to

some market players' expectations, the Governing Council did not cut the deposit facility rate, triggering an initial but very short-lived appreciation of the euro. However, the general tone of the press release indicated a more expansionary monetary policy stance compared to the previous meeting. It stressed, amongst other things, the Governing Council's willingness to act "in line with its commitment to symmetry in the inflation aim", which could, as indicated by the press release itself, make additional accommodative monetary policy measures necessary.

The second communication began – as after each monetary policy meeting – at 2:30 p.m. when the President of the ECB gave his introductory statement and subsequently answered questions from journalists. Over the duration of the press conference, the euro appreciated against all three currencies mentioned above. President Draghi cited low inflation expectations, softening economic growth dynamics and geopolitical factors as drivers of additional accommodative measures that the ECB Governing Council may adopt going forward. However, he estimated that the risk of a recession in the euro area was comparatively low, not least due to the continued robust situation on the labour market. Furthermore, as the information on the future monetary policy stance was still very general, investors revised their conclusions from the press release and, on balance, the euro picked up notably against the pound sterling and the yen. Recovery against the US dollar was not as pronounced due to a countermovement stemming from the simultaneous publication of surprisingly positive economic data for the United States. These noteworthy intraday fluctuations in euro exchange rates are not captured by the reference rates.

**Euro exchange rates on the day of the ECB Governing Council's meeting of 25 July 2019**

Minute data, log scale



Source: Refinitiv. <sup>1</sup> An increase indicates an appreciation of the euro.

Deutsche Bundesbank

<sup>1</sup> For a detailed analysis of the effects of monetary policy announcements by the ECB on financial market variables, see Kerssenfischer (2019).

<sup>2</sup> The ECB fixes its reference rates every day at 2:15 p.m. On days when the Governing Council's monetary policy decisions are announced, this therefore occurs in the time window between the press release and the press conference. This may, as in the present case, result in a less representative reference rate for the day.

agreement on a fiscal package for the next two years, which has now been adopted and which suspends the debt ceiling for the same period, thus averting the threat of shutdowns to federal authorities. At the beginning of August, the euro ended up falling to a two-year low against the US dollar after the Fed's monetary policy meeting culminated in a decision to lower the interest rate by 25 basis points, but it gave relatively little away as to future interest rate moves. The euro rebounded again recently, trading at US\$1.12, which was 0.8% lower than at the end of the first quarter.

*Euro appreciates against pound sterling ...*

In the reporting period, the euro exhibited a gradual appreciation against the pound sterling, which was due, in large part, to the mounting probability of the United Kingdom exiting the EU without a deal. The expectation that this could indeed happen firmed up even more when Prime Minister Theresa May announced at the end of May that she was stepping down as leader of the Conservative Party and also, with effect from 24 July, as Prime Minister, and the most likely candidates to succeed her rejected parts of the negotiated withdrawal deal. This all meant that even unexpectedly positive economic figures for the labour market and the retail sector in the United Kingdom were unable to strengthen the pound sterling with any permanency. Following Boris Johnson's election as the leader of the Conservative Party and his then becoming Prime Minister, the pound sterling's slide picked up speed at the end of July. A contributing factor here was the EU's repeated rejection of the United Kingdom's fresh demands to reopen negotiations, which, in the eyes of investors, further upped the chances of a no-deal Brexit. In addition, the news of a GDP contraction in the second quarter in the United Kingdom served to weaken the pound sterling. As a consequence, the euro reached its highest level against the pound sterling in two years. The end of the reporting period saw the euro trading at £0.92, recording a gain of 7.0% since the end of March.

### 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.

Deutsche Bundesbank

As expectations of interest rate cuts in the euro area abounded, the euro was marked by a downward trend against the yen, partly as a result of increasingly negative interest rate spreads. Over the reporting period, short-term fluctuations in the EUR/JPY exchange rate could often be ascribed to economic and political signals that influenced investors' risk aversion. For example, when global risk aversion increases, this tends to trigger net capital inflows in countries like Japan, in part due to the unwinding of currency carry trades, which, taken in isolation, strengthens the value of the yen. During May and at the beginning of August, the euro therefore depreciated against the yen, especially as

*... but depreciates against yen*

the rhetoric in the trade dispute between China and the United States intensified on both sides. For a time, the euro was trading at its lowest against the yen in over two years. In June, however, the global investors' risk assessment temporarily relaxed again somewhat and, with the exception of slight fluctuations, the EUR/JPY rate moved sideways. At the end of the period under review, the euro stood at ¥118, which was 4.9% lower than at the beginning of the second quarter of 2019.

*Euro somewhat stronger in effective terms*

On a weighted average against the currencies of 19 major trading partners, the euro appreciated by 1.8% compared to the beginning of the second quarter. In addition to its appreciation against the pound sterling, the single currency also posted gains against, in particular, the Korean won (6.0%), the Chinese renminbi (4.1%), the Norwegian krone (3.7%) and the Swedish krona (3.2%). Factors including subdued economic prospects and an expansionary domestic monetary policy weighed on the last of these, helping the euro to reach its highest point against the Swedish krona in ten years in mid-May. Against the Norwegian krone, the euro even reached a record high for a time. By contrast, the single currency reached its lowest point in around two years against the Swiss franc (-2.8%) and the Canadian dollar (-1.1%). Looking beyond the group of 19 partner currencies, the euro's appreciation against the Argentine peso following the country's presidential primaries (38.4%) plus the single currency's fluctuations against the Turkish lira (-1.8% on balance) were particularly marked developments. In mid-May, the euro was still trading briefly at TRY 6.97, but the tentative easing of strained relations with the United States served to mitigate concerns surrounding possible sanctions against Turkey, which put the lira on a path to a broad-based recovery. At the end of the reporting period, the euro was trading at TRY 6.23.

## Securities markets and portfolio investment

### Bond market

Yields on government bonds in the major currency areas declined from the end of March, in some cases markedly. In the United States, yields on ten-year US Treasuries fell by 89 basis points to 1.5% from the end of the first quarter. Over the reporting period, a particular contributing factor here was communication perceived as accommodative from the Fed. The Federal Open Market Committee (FOMC) then did indeed decide when it met at the end of July to lower the target corridor for the federal funds rate to 2% to 2.25%. This was the Fed's first rate cut in over ten years. In explaining its decision, the Fed cited international developments that were weighing on the US economy as well as dampened inflationary pressure. Prior to the meeting, market participants had largely felt that a somewhat looser monetary policy in general and a rate cut in July specifically were on the cards. This was reflected in the very flat US yield curve and the fed funds futures rate.<sup>1</sup> Lower term premiums, in particular, also played a part in the decline in long-term yields.

*Yields down on both sides of Atlantic*

The yield on ten-year Bunds dropped by 57 basis points to -0.7% from the end of the first quarter. In the market, economic indicators that fell short of market expectations and declining inflation expectations fed expectations of further accommodation in monetary policy. The fall in yields persisted after the ECB Governing Council confirmed in principle the possibility of further monetary policy easing at its July meeting. Most recently, yields were being placed under pressure by the international influences mentioned above. On balance, the yield spread between ten-year US and German government bonds narrowed by 25 basis points to 224 basis points.

*Yield on ten-year Bunds also down*

<sup>1</sup> Measured in terms of the difference between ten-year and two-year yields, the spread of the US yield curve was negative at last count.

*German yield curve very flat*

The yield curve derived from yields on Federal securities became flatter from the end of the first quarter. Measured in terms of the difference between ten-year and two-year yields, the spread stood at 23 basis points at last count, meaning that the yield curve was, for a time, flatter than it had been in over ten years. The flattening was the product of a strong decline in medium to long-term yields. Bonds with a residual maturity of over three years hit historic lows in the reporting period. The decline in yields is due, in particular, to lower term premiums. The implicit short-term interest expectations contained in the yield curve for Bunds likewise decreased as of the end of March, albeit only slightly.

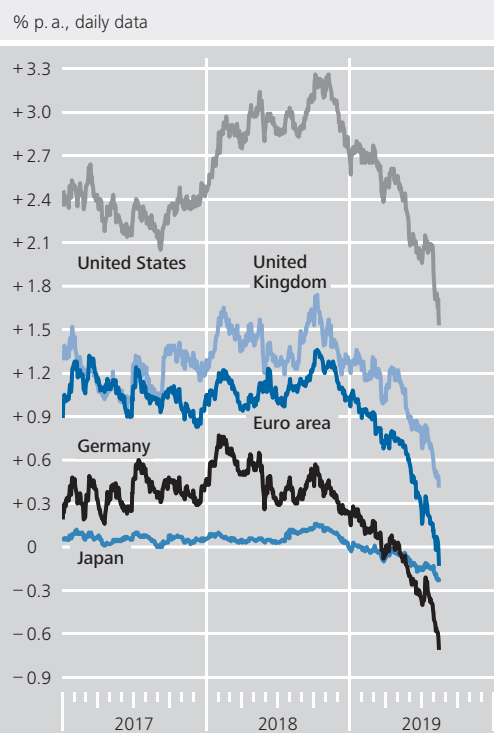
*Yield spreads over German Bunds considerably narrower*

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 March (-27 basis points to 82 basis points). In light of the even lower interest rate on safe bonds, European bonds with higher yields were a more attractive prospect for market participants ("search for yield"). In addition, political uncertainties in some countries initially took a back seat: the European Commission chose not to launch an excessive deficit procedure against Italy after the Italian government passed further measures to curb new debt. At last count, while the yield spread was widening again against the backdrop of the government crisis in Italy, it was still 52 basis points below the end-March level at 205 basis points. Greece saw a change of government following parliamentary elections. The new government announced a package of comprehensive reforms and tax cuts. In addition, Greece made another successful foray into the capital market, issuing a seven-year bond, after having placed two long-term bonds in the first quarter. The yield spread of Greek bonds fell by 108 basis points to 273 basis points.

*Yields down in United Kingdom and Japan*

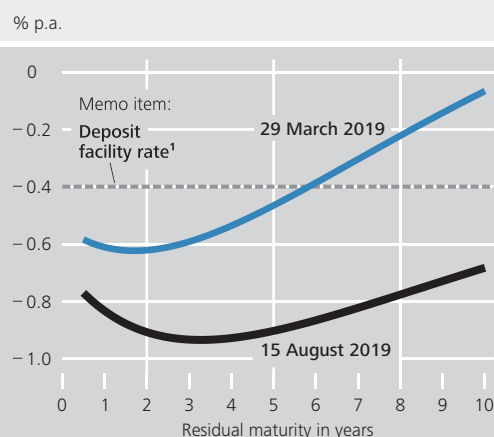
Compared to the end of March, yields on ten-year UK bonds (gilts) were down by 59 basis points to 0.4%. The Bank of England main-

### Bond yields\* in the euro area and selected countries



Source: Bloomberg. \* Government bonds with a residual maturity of ten years.  
 Deutsche Bundesbank

### Yield curve in the German bond market\*

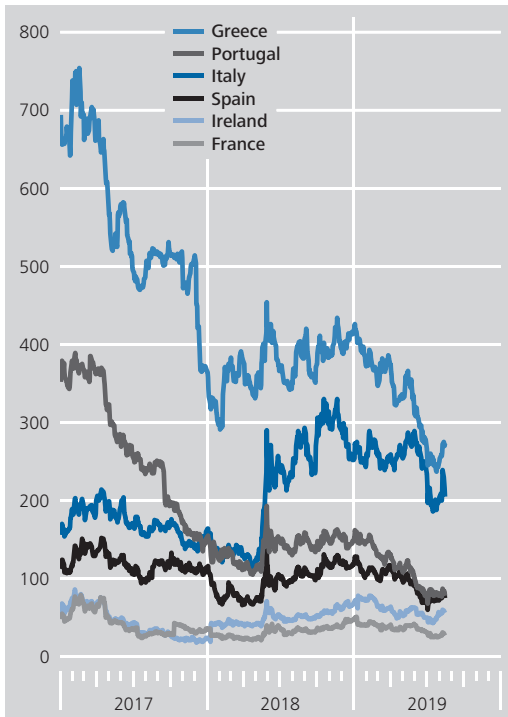


\* Interest rates for (hypothetical) zero coupon bonds (Svensson method), based on listed Federal securities. <sup>1</sup> Current interest rate on the deposit facility in place since 15 March 2016.  
 Deutsche Bundesbank

tained its monetary policy stance. It emphasised that a gradual tightening might only become necessary following an orderly exit from the EU. Ten-year Japanese sovereign bonds were yielding 15 basis points lower than at the end of March, at -0.24%. Yields thus remain at the lower end of the broader corridor specified

### Spreads of ten-year government bonds over German Bunds

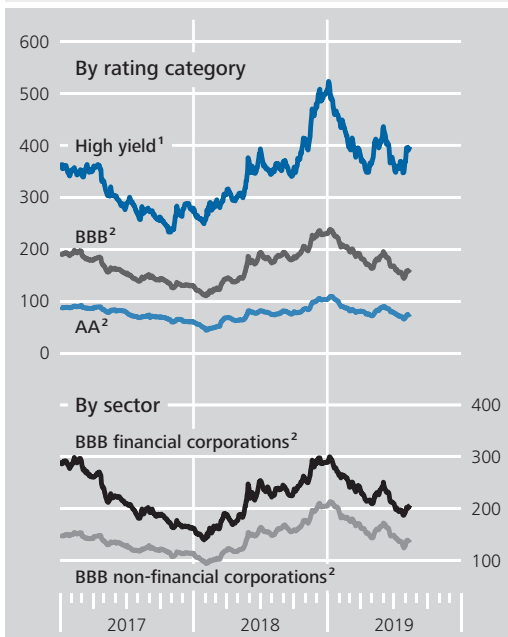
Basis points, daily data



Sources: Bloomberg and Bundesbank calculations.  
 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 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.

Deutsche Bundesbank

by the Bank of Japan as part of its yield curve control programme.

Five-year forward inflation rates five years ahead reached a low of 1.1% in the euro area in mid-June before rebounding slightly. On balance, however, they were still lower than the level prevailing at the end of March (1.2%, or -12 basis points) as this report went to press. But the indicator is currently giving a distorted impression of long-term inflation expectations on account of also containing negative liquidity and inflation risk premia. These risk premia are the reason for the gap between market-based indicators and higher survey-based inflation expectations. Compared to the end of March, however, the long-term (six to ten-year) inflation expectations for the euro area collected by Consensus Economics also slipped slightly to 1.8%. For Germany, they remained broadly unchanged at 1.6%.

*Forward inflation rate and survey-based inflation expectations down*

Yields on European corporate bonds declined sharply during the period under review. Bonds issued by BBB-rated financial corporations with a residual maturity of between seven and ten years were yielding 1.3% as this report went to press, down 92 basis points on the end of March. Yields on non-financial corporate bonds of equivalent maturity fell by 85 basis points to 0.7%. Around two-thirds of this drop in yields is attributable to the decline in risk-free interest rates. Yield spreads over Bunds likewise decreased significantly, by 31 basis points for financial corporations and by 25 basis points for non-financial corporations. Yield spreads are thus currently far below their respective five-year averages. All in all, financing conditions for European corporations in the bond market are highly favourable.

*Corporate bond yields down significantly*

Gross issuance in the German bond market amounted to €324 billion in the second quarter. It thus lagged markedly behind the volume of issuance in the first quarter (€377½ billion). After deducting redemptions and taking account of changes in issuers' holdings of their own bonds, the resulting figure of €22 billion

*High net sales in bond market*

shows that significantly fewer debt securities were issued than in the previous quarter (€52½ billion). In addition, foreign borrowers placed debt securities worth €15½ billion in the German market. Thus, funds totalling €37½ billion net were raised in the German bond market in the reporting period.

*Rise in credit institutions' capital market debt*

German credit institutions increased their capital market debt by €11 billion net in the second quarter. Some €10 billion worth of debt securities issued by specialised credit institutions and €4½ billion worth of mortgage Pfandbriefe were placed in the market. By contrast, credit institutions redeemed public Pfandbriefe, the outstanding volume of which has been in decline for years, to the tune of €3 billion.

*Net public sector issuance*

Between April and June, the public sector redeemed own-debt securities worth €4 billion net. This figure includes issues by resolution agencies set up for German banks, which are ascribed to the public sector for statistical purposes. In particular, capital market borrowing at the state government level was trimmed by €3 billion during this period. By contrast, central government issued ten-year and 30-year bonds for €11 billion and €4½ billion, respectively. This contrasted with net redemptions of Federal notes (Bobl) and Treasury discount paper (Bubills) (€6½ billion and €3 billion, respectively). Two-year Federal Treasury notes worth €1 billion net were issued.

*Net issuance of corporate bonds*

Domestic enterprises took advantage of the favourable financing environment and issued debt securities worth €15 billion net in the quarter under review, up significantly on the previous quarter (€6 billion). Overall, these were chiefly bonds with maturities of more than one year. Non-financial corporations increased their market debt by €4 billion.

*Purchases of debt securities*

In the domestic bond market, all sectors added debt securities to their portfolios in the second quarter of 2019. Domestic non-banks were the main buyers, increasing their holdings of debt securities by €15 billion. They invested largely in

### Investment activity in the German securities markets

€ billion

Item	2018	2019	
	Q2	Q1	Q2
<b>Debt securities</b>			
Residents	16.7	16.6	24.5
Credit institutions	- 11.1	7.0	5.8
of which:			
Foreign debt securities	- 3.1	7.4	7.7
Deutsche Bundesbank	19.2	- 8.1	3.6
Other sectors	8.6	17.7	15.0
of which:			
Domestic debt securities	3.7	- 2.6	6.3
Non-residents	- 18.5	61.0	13.1
<b>Shares</b>			
Residents	26.2	7.4	12.7
Credit institutions	0.9	- 1.4	0.5
of which:			
Domestic shares	0.6	- 0.6	0.4
Non-banks	25.3	8.8	12.2
of which:			
Domestic shares	6.0	6.5	2.8
Non-residents	4.4	- 4.1	- 1.5
<b>Mutual fund shares</b>			
Investment in specialised funds	12.9	20.0	12.8
Investment in retail funds	4.1	3.1	4.7
of which:			
Equity funds	- 1.6	- 0.4	- 0.6

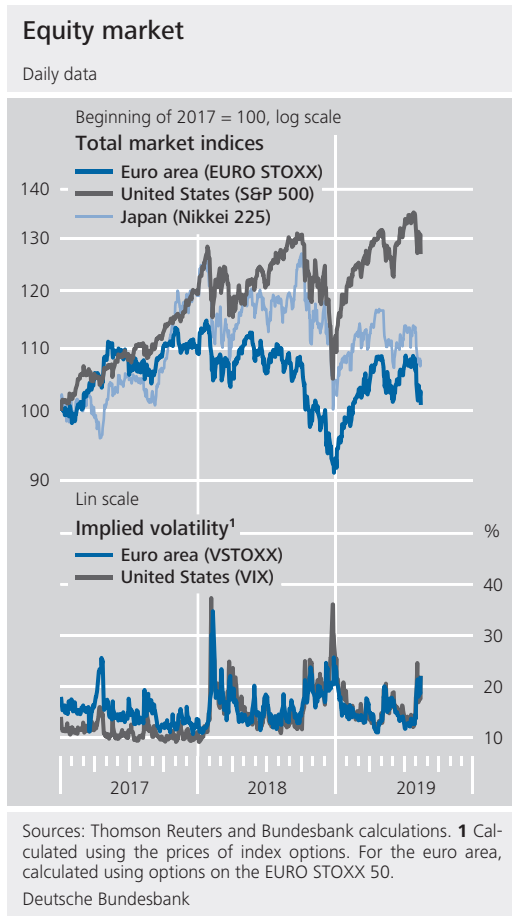
Deutsche Bundesbank

foreign paper. The Bundesbank also expanded its bond portfolio by €3½ billion. Foreign investors and German credit institutions acquired debt securities worth €13 billion and €6 billion net, respectively.

### Equity market

In the wake of the latest escalation of the trade dispute between the United States and China, the international equity markets surrendered most, if not all, of the interim gains they had made. After trade negotiations between the two countries were resumed at the end of June, criticism regarding the status of negotiations was raised as early as mid-July. This was followed by a significant decline in equity prices in early August, when the United States announced further tariffs on Chinese imports and the RMB/USD exchange rate then fell to its lowest level in 11 years. Given the heightened uncertainty surrounding the global trade and

*Equity markets hit by trade conflict*



while the Japanese Nikkei 225 was down by -3.8% at the end of the reporting period. The indicators derived from the Bundesbank's dividend discount model are not currently signalling an unusually low or high valuation level for either the S&P 500 or the EURO STOXX.

Bank shares' performance fell far short of the total market's performance, with US bank shares down by -2.1%, British bank shares by -10.2% and euro area bank shares by as much as -16.9%. The main reasons for this are the flatter yield curve and concerns that the low interest rate environment will become entrenched. Both of these factors are putting pressure on banks' profitability prospects.

*Bank shares still underperforming total market*

Price uncertainty in the equity markets, as measured by implied volatility, was at an almost unprecedented low for a long time during the period under review. However, the aforementioned escalation of the trade conflict between the United States and China translated into a surge in price uncertainty.

economic outlook, analysts revised their earnings expectations for European and US corporations slightly downwards. The fact that the renewed escalation of the trade conflict did not result in a greater fall in equity prices is not least thanks to globally declining interest rates, which are increasing the present value of future dividends.

In the second quarter of 2019, domestic enterprises placed new shares worth €2 billion net in the German equity market, which is on par with the first three months of the year. The outstanding volume of foreign shares in the German market also rose over the same period, by €9½ billion. On balance, equities were purchased mainly by domestic non-banks (€12 billion), as well as by domestic credit institutions (€½ billion). By contrast, foreign portfolio investors lowered their equity holdings by €1½ billion.<sup>2</sup>

*Equity market funding*

*Recent months marked by considerable price falls and surge in volatility*

On balance, equity prices in most countries were, on account of sharp fluctuations, slightly below levels observed at the end of March as this report went to press. Only the US S&P 500 racked up gains, climbing by 0.5% net. It was boosted, inter alia, by the labour market figures published in early July, which exceeded most analysts' expectations. Despite the government reshuffle in the United Kingdom and the ongoing Brexit uncertainty, the British FTSE All-Share index fell, on balance, to a slightly lesser extent than the European EURO STOXX index (-2.8% compared with -3.3%). At -4.6%, the decline of the German CDAX was even greater,

## Mutual funds

Domestic investment companies recorded inflows of €17½ billion in the three-month period from April to June, after raising funds totalling €23 billion in the first quarter. The fresh funds mainly accrued to specialised funds reserved

*Sales and purchases of mutual fund shares*

<sup>2</sup> For further details, see "Direct investment" on p. 47.



for institutional investors (€13 billion). Of the various asset classes, mixed securities funds (€10 billion) and open-end real estate funds (€5 billion) were the chief sellers of new fund shares, as were, albeit to a lesser extent, funds of funds (€1½ billion) and bond funds (€½ billion). Conversely, equity funds were forced to redeem fund shares in the amount of €1 billion. Foreign funds operating in the German market attracted fresh funds totalling €8 billion net in the second quarter. Domestic non-banks were the main buyers, adding fund shares worth €27½ billion to their portfolios. On balance, their focus was predominantly on German paper. Foreign investors scaled back their fund portfolios in Germany by €1 billion net. Domestic credit institutions disposed of fund shares worth €1 billion in the quarter under review.

## ■ Direct investment

*Low capital exports in direct investment*

As with portfolio investment, direct investment saw net capital exports in the second quarter of 2019. While outflows in portfolio investment amounted to €16 billion net, they totalled €4½ billion for direct investment.

*Capital outflows as a result of transactions by domestic enterprises*

Firms domiciled in Germany recorded outflows of €31½ billion between April and June, after €44 billion in the previous quarter. German firms boosted their equity capital abroad by €31 billion, of which just under half took the form of reinvested earnings. Compared with this, their lending to affiliated enterprises abroad was low, at €½ billion net. Here, small outflows of funds from financial credits were matched by inflows of funds from trade credits. The main destinations for German outward direct investment were the United States, Italy and Ireland.

*Rise in inward direct investment in Germany*

In the second quarter of 2019, inward direct investment in Germany by foreign enterprises amounted to €27 billion net (preceding quarter: €9 billion). They increased their equity capital by €3 billion, of which half was attributable

## Major items of the balance of payments

€ billion

Item	2018	2019	
	Q2	Q1	Q2P
I. Current account	+ 60.6	+ 66.7	+ 59.7
1. Goods <sup>1</sup>	+ 60.1	+ 59.9	+ 58.8
2. Services <sup>2</sup>	- 2.8	- 2.3	- 4.2
3. Primary income	+ 8.5	+ 25.7	+ 11.3
4. Secondary income	- 5.2	- 16.6	- 6.2
II. Capital account	- 2.6	+ 1.4	- 0.5
III. Financial account (increase: +)	+ 56.8	+ 59.4	+ 30.4
1. Direct investment	+ 35.6	+ 35.3	+ 4.7
Domestic investment abroad	+ 58.3	+ 44.2	+ 31.6
Foreign investment in the reporting country	+ 22.6	+ 9.0	+ 26.9
2. Portfolio investment	+ 23.5	- 16.7	+ 16.1
Domestic investment in foreign securities	+ 5.6	+ 36.5	+ 26.7
Shares <sup>3</sup>	- 2.2	+ 0.5	+ 3.0
Investment fund shares <sup>4</sup>	+ 4.5	+ 10.7	+ 8.2
of which:			
Money market fund shares	+ 0.2	- 2.3	+ 2.2
Long-term debt securities <sup>5</sup>	+ 3.8	+ 18.0	+ 17.3
of which:			
Denominated in euro <sup>6</sup>	+ 5.2	+ 16.0	+ 13.6
Short-term debt securities <sup>7</sup>	- 0.5	+ 7.3	- 1.8
Foreign investment in domestic securities	- 17.8	+ 53.2	+ 10.7
Shares <sup>3</sup>	+ 3.7	- 4.0	- 1.5
Investment fund shares	- 3.0	- 3.8	- 0.9
Long-term debt securities <sup>5</sup>	- 26.4	+ 38.8	+ 19.9
of which:			
Issued by the public sector <sup>8</sup>	- 22.0	+ 16.2	+ 1.3
Short-term debt securities <sup>7</sup>	+ 7.9	+ 22.2	- 6.8
3. Financial derivatives <sup>9</sup>	+ 10.2	+ 6.2	+ 11.4
4. Other investment <sup>10</sup>	- 12.1	+ 34.8	- 2.2
Monetary financial institutions <sup>11</sup>	- 13.2	- 51.5	- 0.4
Enterprises and households <sup>12</sup>	- 25.0	- 15.3	- 5.8
General government	- 4.4	- 5.0	+ 0.2
Bundesbank	+ 30.5	+ 106.7	+ 3.9
5. Reserve assets	- 0.4	- 0.1	+ 0.4
IV. Errors and omissions <sup>13</sup>	- 1.2	- 8.7	- 28.8

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

Deutsche Bundesbank

to reinvested earnings. Affiliated enterprises in Germany received further funds via intra-group loans (€24 billion). The overwhelming majority of these took the form of financial credits, some of which were reverse investments. Using such loans, the non-resident financing subsid-

aries of domestic enterprises typically pass on proceeds from the issuance of securities to their domestic parent companies. The main countries of origin for inward direct investment in Germany were Ireland, the Netherlands and Luxembourg.

## ■ List of references

Kerssenfischer, M. (2019), Information Effects of Euro Area Monetary Policy: New Evidence from High-Frequency Futures Data, Deutsche Bundesbank Discussion Paper, No 07/2019.