

■ Financial markets

■ Financial market setting

Financial markets pricing receding uncertainty into valuations

Global financial markets have been shaped by countervailing developments over the final quarter of 2020 and so far in the first quarter of this year: while the availability of vaccines has strengthened market participants' optimism, the renewed rise in infections and containment measures has been perceived as a drag on growth. Within the euro area, the Governing Council of the ECB responded to the second wave of infections with a decision to increase the envelope of the pandemic emergency purchase programme (PEPP) and to extend the horizon for net purchases under the programme. This helped bring down the yields on sovereign bonds of euro area countries with relatively low credit ratings. Average yields on euro area corporate bonds also continued to decline, hitting new lows in January. By contrast, yields on highly rated European sovereign bonds picked up, mainly due to the interest rate linkage with the United States, where yields on US Treasuries rose sharply. Market participants now saw a greater likelihood of the incoming US administration undertaking substantial deficit spending. An increase in market-based measures of long-term inflation expectations, which was observed in numerous countries, was also particularly pronounced in the United States. The combined impact of the aforementioned developments sent global equity markets sharply higher. Financial market participants upgraded their earnings outlook, particularly for US enterprises. In foreign exchange markets, hopes that the vaccinations would help global activity bounce back far more quickly than previously expected dampened demand for currencies regarded as relatively safe havens. This meant that the US dollar and yen lost value in effective terms. The euro also depreciated on a weighted average, though its losses were small by comparison.

■ Exchange rates

The euro appreciated markedly against the US dollar up until the first week of January. Though infection rates worldwide were still on the increase, brighter sentiment in financial markets toward the end of 2020 fuelled net capital outflows from the United States, weighing on the price of the US dollar. Besides vaccine rollouts, there were a number of other factors which helped cheer markets. One was the negative impact on the US dollar of speculation that the US Federal Reserve might further loosen its monetary policy stance, despite rising inflation expectations. By contrast, the ECB Governing Council's decision in early December to significantly increase the PEPP envelope had already been priced into exchange rates. Mid-December, furthermore, saw the EUR/USD exchange rate get a boost from surprisingly upbeat economic data for the euro area, which contrasted with gloomier-than-expected economic news from the United States. The EU-UK trade and cooperation agreement, which was concluded only shortly before the transitional period expired at the end of 2020, gave the euro additional traction relative to the US dollar.

After hitting US\$1.23 on 6 January 2021, its highest level since April 2018, the euro's exchange rate against the US dollar has gone into reverse. Yields in US bond markets rose perceptibly in anticipation of heavier government spending, providing broad-based support for the US dollar. However, sentiment in financial markets deteriorated again somewhat of late amid the spread of particularly infectious variants of the COVID-19 virus, delays in vaccination programmes and the ongoing economic and social constraints in euro area countries. The euro closed the reporting period at US\$1.21, up 3.2% on its level at the end of September.

Euro gains in value against the US dollar ...

Movements in the nominal effective exchange rate of the euro

Movements in the nominal trade-weighted exchange rate of the euro depend to a considerable extent on the group of partner currencies against which it is calculated.¹ For example, the Bundesbank and the ECB publish the effective exchange rate of the euro on a daily basis against the currencies of both 19 and a far broader group of 42 partner countries. Both groups include the currencies of major European trading partners (i.e. the pound sterling, the Swiss franc and the Polish zloty) and of the biggest non-European industrial countries, such as the US dollar, the yen and the Canadian dollar. The broad group includes numerous other currencies on top of those, e.g. currencies of emerging market economies and commodity-exporting countries. These include the Brazilian real, the Russian rouble and the Turkish lira.

In effective terms, the euro tends to appreciate much more strongly against the currencies of the broad group of countries than against those of the narrower group. This was the case over the course of last year as well. At the end of the period under review, the effective exchange rate of the euro against the currencies of the group of 19 trading partners was 3.0% higher than at the start of 2020. However, the euro's appreciation was higher on a weighted average against the currencies of the broad group of 42 countries (5.4%). Gains against the US dollar and the pound sterling, in particular, made a major contribution to the euro's effective appreciation in both groups. Although appreciation against some other currencies, such as the zloty, was even stronger, currencies such as these have a lower trade weight in the calculation of the weighted average. The differing exchange

rate movements of the euro seen in the two groups of partner countries is due primarily to the very strong appreciation of the euro against those other currencies that are only part of the broad group of 42 trading partners. For example, the euro appreciated by 44.5% against the real, 27.2% against the rouble and, despite its recent rebound, 25.6% against the Turkish lira between the start of 2020 and the end of the period under review.

Longer-term observations also reveal that the nominal effective euro displays a clear tendency to appreciate against the currencies of the broad group of countries. To be more specific, the effective exchange rate of the euro against the group of 42 partner currencies is currently 18.2% higher than its launch exchange rate in early 1999. It is therefore only slightly short of the all-time high it reached in December 2008. By contrast, the same rate against the narrower group of 19 partner currencies is currently 2.5% lower than its launch exchange rate and, at -13.1%, far off its record high.

One key reason for the effective euro's tendency to appreciate against the broad group in the long term is that inflation rates in many emerging market economies, whose currencies are included in this group, were, on average, markedly higher than in the euro area. However, high inflation adversely affects the price competitiveness of the affected country and therefore tends to lead to a deterioration in its current account balance and a nominal depreciation of its

¹ For information on the recalculation of country weights, which now take account of trade in services as well as goods, see Deutsche Bundesbank (2020).

Effective euro exchange rates*

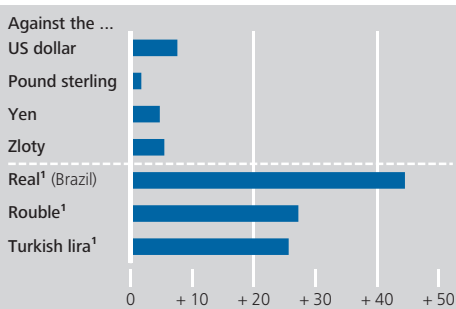
Log scale



* Euro area 19. Rising curves indicate a nominal or real appreciation of the effective euro. ¹ Based on consumer price indices. Deutsche Bundesbank

Nominal appreciation of the euro since the start of 2020

%



Source: ECB. ¹ Selected currencies that are factored into the calculation of the effective exchange rate of the euro against 42 trading partners but not into the calculation against 19 trading partners. The remaining currencies are factored into both calculations. Deutsche Bundesbank

currency. Nominal appreciation of the euro against a group comprising such countries is therefore structural in nature and can be seen as an equilibrium phenomenon that balances out international inflation differentials.

By contrast, inflation differentials for the narrower group of 19 partner currencies compared to the euro area are, on a weighted average, small at most. For this reason, it is not possible to discern any significant longer-term appreciation trend for the effective euro in this group, either. The real effective exchange rate of the euro reflects the interaction between the relative inflation rates between the euro area and the partner countries being looked at here, on the one hand, and the nominal appreciation trend for the effective euro in the broad group, on the other. In addition to nominal exchange rate movements, the real effective exchange rate also takes into account the inflation differentials arising at the same time between the euro area and its trading partners. This indicates that there is likewise no discernible long-term real appreciation trend for the euro against the broad group of 42 partner countries. Against this background, the relatively significant nominal appreciation of the euro against the broad group can be seen as a corrective movement that is helping to smooth out international inflation differentials.

... and against the yen ...

The euro also appreciated against the yen on balance. Reports surrounding the coronavirus pandemic played a key role in this regard, given their impact on market sentiment. It is a common tendency for investors to withdraw some of their assets from Japan when risk appetite increases, and so it was in the second half of November, when the euro gained in value against the yen as the markets showed a greater propensity to take risk. Another factor weighing on the yen was the announcement of a surprisingly steep drop in consumer prices, which amplified market concerns that the Bank of Japan might come under fresh pressure to loosen its monetary policy stance even further. After the United Kingdom and EU reached an agreement on their future relationship, the euro gained further ground against the yen in the last week of December, climbing to ¥128 in mid-February, the highest it has been since December 2018. As this report went to press, the euro was around 3.2% up on the end of the third quarter of 2020.

... but depreciates against the pound sterling

In the last few months of 2020, movements in the euro's exchange rate against the pound sterling were characterised primarily by changing assessments about the likelihood of a successful outcome to the UK's negotiations with the EU. The pound sterling experienced a bout of distinct downward pressure in mid-December when negotiations seemed to have stalled and talks were postponed for a number of days. Shortly after that, the UK currency came under additional pressure amid market speculation surrounding the introduction of negative policy rates, which had been discussed by the Bank of England. However, this bad patch for the pound sterling later gave way to burgeoning hopes that a trade and cooperation agreement might be reached with the EU, as indeed it was, which sent the UK currency broadly higher. Mid-January saw the pound sterling firm up again after the Bank of England governor expressed scepticism about the introduction of negative policy rates. When this report went to press, the euro was trading



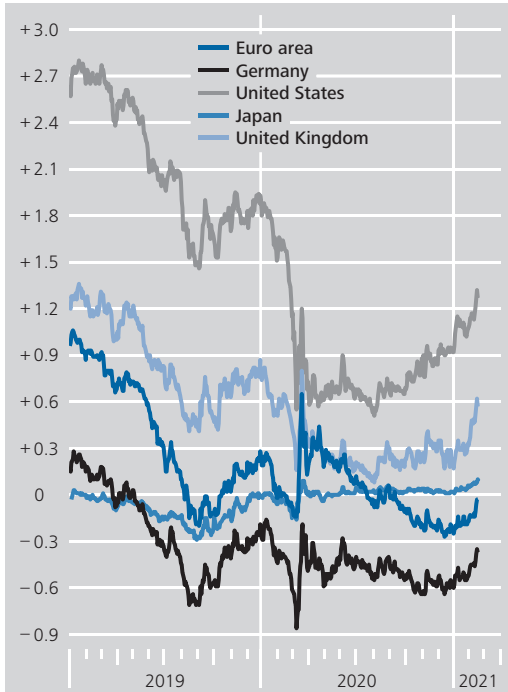
at £0.87, around 5.1% lower than at the end of September.

On a weighted average against the currencies of 19 major trading partners, the euro depreciated on balance compared to the end of September (-1.1%). It recorded losses not just against the pound sterling, but against other currencies, too, including those of major partner countries in central Europe, losing 1.3% against the zloty, 5.0% against the Czech koruna and 1.9% against the forint. More information on movements in the effective euro exchange rate against various groups of countries can be found in the box on pp. 41f. On balance, the price competitiveness of euro area suppliers improved somewhat over the period under review, but looking at the long-term average, their competitive position can currently still be considered neutral.

Euro down in effective terms

Bond yields* in the euro area and selected countries

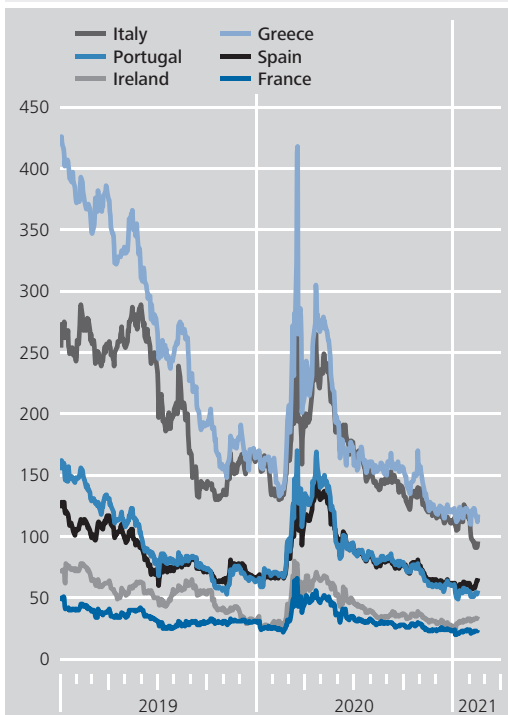
% p. a., daily data



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

Spreads of ten-year government bonds over Federal bonds

Basis points, daily data



Sources: Bloomberg and Bundesbank calculations.
 Deutsche Bundesbank

Securities markets and portfolio investment

Bond market

Government bond yields in the major currency areas registered differently sized gains during the period under review. Ten-year US Treasuries were yielding 1.3% at last count, 61 basis points more than at the end of September. In the US Treasury market, the welcome news on the vaccines front coincided with a reassessment of the outlook for economic activity and inflation, in particular in the wake of the US elections in November and the Senate elections in Georgia in January. Financial market participants responded to the incoming US administration's plans for extensive fiscal action by pricing in a higher risk of rising inflation. One major feature of the rise in yields at the moment is a higher nominal term premium, which compensates investors for taking on interest rate risk.

Ten-year US Treasury yields up

Ten-year Bunds yielded -0.4% on balance, 18 basis points up on the end of September. News of an imminent vaccine rollout also sent Bund yields higher in November, but the prospect of the economy making a steady recovery was not the only factor at play in the market for Federal bonds. Indeed, with a way out of the pandemic slowly coming into view, Bunds attracted less demand as a safe haven. The rise in yields was counteracted by the ECB Governing Council's decision in December to further loosen the degree of monetary policy accommodation and expand and extend PEPP purchases. This is why Bund yields did not fully keep pace with the rise in US Treasury yields over the reporting period. As a result, the spread between ten-year US Treasuries and ten-year Bunds widened by 44 basis points to 165 basis points, though it remained below the five-year average of 197 basis points.

Ten-year Bund yields up slightly

The yield curve derived from yields on Federal securities has steepened since the end of September. Measured in terms of the difference

Yield curve steeper

between ten-year and two-year yields, the spread stood at 33 basis points (up 17 basis points). As this report went to press, yields on Federal securities were no longer negative as of around the 20-year mark. A model breakdown indicates that implicit expectations for short-term interest rates contained in the yield curve are almost unchanged overall (down 1 basis point). However, the term premium component, at 21 basis points, is up on the end of September, though it is still in negative territory. In effect, then, an investor would still earn more, in terms of the expected value, by rolling over investments in short-dated paper than by purchasing a long-dated bond with the same maturity.

Euro area yield spreads narrower

Yield spreads between ten-year Federal bonds and matched-maturity government bonds from other euro area countries (GDP-weighted average excluding Germany) narrowed by 10 basis points to 51 basis points over the course of the reporting period, leaving them more or less back at 2008 levels. The ECB Governing Council's December decision to expand and extend PEPP purchases caused yield spreads to narrow further, with the gap declining particularly distinctly for euro area government bonds with lower credit ratings. Country-specific risks, such as the government crisis in Italy, had no more than a moderate and short-lived impact on yield levels by historical standards. Moreover, market liquidity indicators showed no signs of tension in euro area sovereign bond markets.

Yields up in UK and Japan

Ten-year UK government bonds saw yields move in line with global developments to reach 0.6% at last count, 39 basis points up on the end of September. Yields remained calm before, during and after the successful conclusion of the EU-UK trade and cooperation agreement on 24 December and the expiry of the transition period at the end of the year. Ten-year Japanese government bonds saw yields add 7 basis points to reach 0.1%, which is somewhat higher than at the end of September. At the close of the reporting period, yields were thus at the upper end of the target range in which



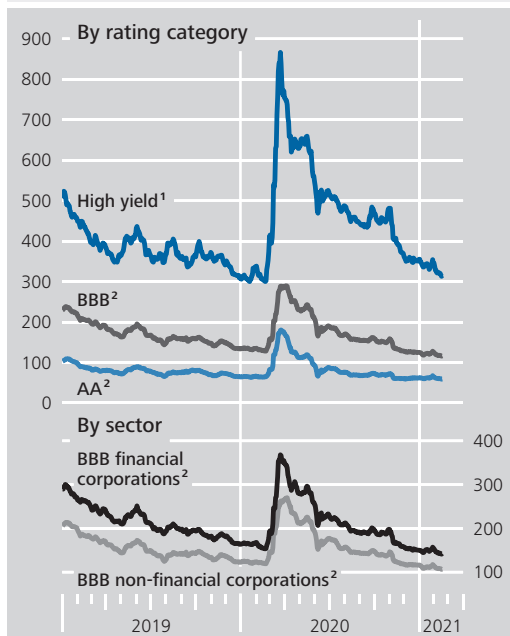
market participants assume that the Bank of Japan wishes to keep interest rates as part of its policy to control the yield curve.

These factors also drove forward inflation rates over a five-year period starting in five years' time, as implied by inflation-linked swaps (5y5y ILS rates), sharply higher for the euro area to 1.3% (+18 basis points). This left them close to their pre-COVID-19 level and distinctly above their low of 0.7% from March 2020. Survey-based inflation expectations for the euro area six to ten years ahead, as computed by Consensus Economics, also picked up of late, rising slightly to 1.9%. Inflation risk and liquidity pre-

Forward inflation rates up in euro area and United States

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

spreads plummeting by more than 150 basis points. Remarkably, CDS spreads for European enterprises have eased only moderately since the end of the third quarter of 2020, with the ten-year iTraxx 125 losing 8 basis points. The sharp drop in interest rate spreads over safe haven assets suggests that market participants were prepared to take risks onto their balance sheets in return for comparatively low premia. This could be an indication that market participants are expecting fiscal policy to continue shielding enterprises with access to capital markets against revenue declines and the central bank to carry on keeping financial market conditions favourable. As in the market for lower-rated government bonds, conditions like these mean that fundamental risks have a relatively mild impact on financing conditions. Overall, then, financing conditions for European enterprises can be considered highly favourable at the current juncture.

mia are chiefly responsible for the gap between market and survey-based expectations. In the United States, market-based five-year forward inflation rates in five years also registered a strong increase, advancing by 31 basis points to 2.4%.

Corporate bond yields very low

Yields on European corporate bonds have fallen sharply since the end of the third quarter of 2020, with some of them touching all-time lows in January. Bonds issued by BBB-rated financial corporations with a residual maturity of between seven and ten years were yielding 1.0% as this report went to press, 39 basis points lower than at the end of September. Yields on non-financial corporate bonds declined, too, shedding 26 basis points to reach 0.6%. Since the yields on matched-maturity Federal securities rose on balance, the spreads of European financial and non-financial corporate bonds over Bunds narrowed by 55 and 42 basis points, respectively. The drop in yields on high-yield bonds was particularly heavy, with

In the fourth quarter of 2020, gross issuance in the German bond market was well down on the figure for the preceding three-month period. Overall, German borrowers issued paper to the tune of €332 billion, down from €499 billion in the previous three months. Net of redemptions and changes in issuers' own holdings, domestic issuers reduced their capital market borrowing by €50½ billion. The outstanding volume of foreign debt securities in the German market rose by €14½ billion in the fourth quarter. Following very high issuance in the first three quarters of 2020, the outstanding volume of bond securities in Germany fell by €36 billion on balance in the final quarter.

Net redemptions of German debt securities

In the quarter under review, domestic enterprises redeemed bonds worth a net €30½ billion, following net issuance amounting to €65 billion in the previous quarter. Other financial institutions, in particular, redeemed bonds on balance, especially structured products such as certificates and warrants. The high issuance and redemptions of such securities, which are often traded across borders, have recently played an important role again in the German

Net redemption of corporate bonds

bond market and in financial transactions with non-residents.

Fall in credit institutions' capital market debt

Domestic credit institutions reduced their capital market debt in the quarter under review by €29 billion, following net issuance of €23 billion in the third quarter. Debt securities issued by special purpose credit institutions, in particular, saw net redemptions (€18 billion). In addition, there was also a decline in the outstanding volume of other bank debt securities that can be structured flexibly (€5½ billion), mortgage Pfandbriefe (€3 billion) and public Pfandbriefe (€2 billion).

Net public sector issuance

In the final quarter of 2020, the public sector issued debt instruments worth €8½ billion net, compared with €104½ billion in the previous quarter in which the Finance Agency had raised large amounts of funds, including short-term funds, to cover the costs of the pandemic in particular. The Federal government (including the resolution agency classified as part of central government) issued mainly ten-year Federal bonds (Bunds) in the amount of €12 billion. Furthermore, following the first placement of a green Federal bond in September 2020, it strengthened its supply of green Federal securities by issuing a green Federal note at the beginning of November. This contrasted with net redemptions of Treasury discount paper (Bubills) amounting to €15 billion. State and local governments issued bonds worth €6 billion net.

Purchases of debt securities

The Bundesbank was the chief net purchaser of debt securities in the fourth quarter of 2020, taking a net total of €70½ billion onto its books, principally under the Eurosystem's asset purchase programmes. Domestic non-banks acquired debt securities for €14 billion net, with foreign paper the focus of interest. By contrast, foreign investors and domestic credit institutions disposed of fixed-income securities amounting to €106 billion and €14½ billion net respectively. For non-resident investors, around one-quarter of the aforementioned amount was attributable to sales and redemptions of structured products.

Investment activity in the German securities markets

€ billion

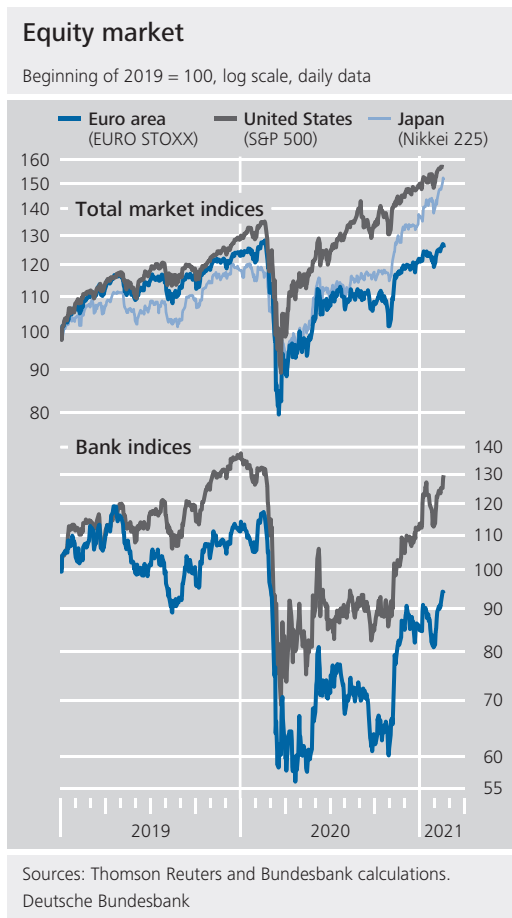
Item	2019	2020	
	Q4	Q3	Q4
Debt securities			
Residents	15.6	55.3	70.0
Credit institutions	- 15.4	- 21.5	- 14.4
of which:			
Foreign debt securities	- 8.0	- 18.9	2.0
Deutsche Bundesbank	10.0	65.8	70.5
Other sectors	21.0	10.9	13.9
of which:			
Domestic debt securities	11.1	- 5.5	1.6
Non-residents	- 37.3	136.1	- 106.1
Shares			
Residents	3.1	60.8	30.2
Credit institutions	3.1	1.9	5.2
of which:			
Domestic shares	3.0	0.2	1.8
Non-banks	0.1	58.9	25.0
of which:			
Domestic shares	- 15.4	40.4	3.0
Non-residents	17.6	- 14.8	- 0.6
Mutual fund shares			
Investment in specialised funds	52.1	18.9	43.3
Investment in retail funds	4.9	4.9	8.0
of which:			
Equity funds	0.7	3.4	4.3

Deutsche Bundesbank

Equity market

Prices on the international equity markets rose significantly in the reporting period. This reflected the hope that the newly approved vaccines would contain the pandemic and lead to a stable path of economic recovery. Furthermore, the political uncertainties mentioned at the beginning of this article eased in the reporting period. Some indices recorded new highs in January. One explanation for the favourable equity market developments is that market participants are looking beyond the current economic slowdown. However, the price increases may also be driven by the expectation that fiscal policy and monetary policy will continue to absorb the financial risks for publicly traded entities. On balance, European and German equities, as measured by the EURO STOXX and CDAX, have seen gains of 16.0% and 10.4% respectively since the end of the third quarter of 2020. The British FTSE-All

Considerable gains on the international equity markets



Share index has risen by 14.7%, while US shares have climbed 16.4%. The price gains in the Japanese Nikkei 225 have been particularly pronounced, rising by 30.4%.

Bank stocks outperform market as a whole

Since the end of the third quarter of 2020, bank stocks on each side of the Atlantic have outperformed their respective overall market, albeit on the back of a weaker recovery in the previous quarters. US bank shares have risen by 50.4%, while those in the euro area have seen similar price gains of 47.8%. Above all, higher earnings expectations for banks are likely to have been the key factor in their above-average performance. Market participants clearly expected fewer loan defaults than previously, given the more positive economic outlook.

Equity market volatility somewhat higher again of late

Price uncertainty in the equity market – as measured by the implied volatility of equity indices calculated from options – decreased somewhat on balance compared to the end of September 2020. However, volatility spiked

again at the end of January from its previously lower levels. Strong fluctuations in individual stocks with unusually high trading volumes on several trading platforms, especially in the United States, contributed to this volatility. According to data supplied by the US Securities and Exchange Commission (SEC), this heavy trading involved an exceptionally high level of short selling for certain stocks.¹ Short selling allows market participants that did not previously hold a security in their portfolio to express their view that this security is too expensive. In January, individual stocks were evidently subject to a situation known as a short squeeze. In a short squeeze, market participants who have shorted securities have to buy these by the expiration date of their position in order to fulfil their contractual delivery obligation, but are unable to do so or only at elevated prices. This can lead to the failure to deliver. During such a short squeeze, a share's price can become uncoupled from the fundamentals and rise dramatically due to the obligation to cover the position. By the same token, if the short squeeze comes to an end, prices may fall again considerably. Individual shares in Germany and the euro area also saw strong price swings. Overall, volatility in the major equity indices at the end of the period under review was higher than its respective five-year average.

Equity valuation levels saw similar developments on both sides of the Atlantic during the reporting period. According to the Bundesbank's dividend discount model, in the euro area there was a fall in the equity risk premium in particular. Thus, in the current environment, market participants were prepared to hold euro area equities for lower compensation. For the EURO STOXX, both the implied cost of equity and earnings yields continue to be close to his-

Valuation level remains high

¹ In a short sale, a market participant sells a certain security at the current price without owning this security at the time of the sale. The short seller borrows the share beforehand from another market participant (usually a broker) and pledges to return the share later on. The difference between the price at the time of the short sale and the price at the time of delivery (less the lending fee) is the short seller's profit or loss.

torical lows, thus signalling a comparatively high stock market valuation. As mentioned earlier, the valuation may also potentially reflect the euro area's current extremely accommodative fiscal and monetary policy. Higher earnings expectations were the main reason for the price gains in the S&P500. By contrast, the rise in risk-free US interest rates, taken in isolation, dampened the increase in prices. As in the euro area, the earnings yield for the S&P500 remained close to its all-time low. The implied capital costs were somewhat higher, but still significantly below the long-term average. As such, valuation also appears to be high for the S&P500.

Equity market funding

On balance, funding in the German stock market totalled €4 billion in the reporting quarter, compared with €25½ billion in the preceding quarter. The volume of foreign shares circulating in the German market rose by €25½ billion over the same period. On balance, equities were purchased mainly by resident non-banks, which include, for example, funds and other financial corporations (€25 billion). Domestic credit institutions added €5 billion net to their share portfolios, while foreign investors reduced their equity exposure in Germany by €½ billion on balance.

Mutual funds

Sales and purchases of mutual fund shares

In the final quarter of 2020, domestic investment companies recorded a significant net inflow of €51½ billion, compared with €24 billion in the previous quarter. Investment companies often register higher inflows of funds in the final months of a year. On balance, the bulk of the fresh funds was channelled to specialised funds reserved for institutional investors (€43½ billion). Among the asset classes, mixed securities funds, in particular, saw significant inflows of capital (€23½ billion), with equity funds (€9½ billion), funds of funds (€6 billion), open-end real estate funds and bond funds (€5 billion each) also recording inflows. The outstanding volume of foreign mutual fund shares



in Germany rose by €30½ billion in the reporting period. Mutual fund shares were bought on balance almost exclusively by domestic non-banks, which added fund shares worth €77½ billion net to their portfolios. Most of this paper was issued by domestic mutual funds. Domestic credit institutions and non-resident investors increased their fund portfolios by €2½ billion and €2 billion net respectively.

Direct investment

Transactions in cross-border portfolio investment resulted in net capital exports of €173½

Major items of the balance of payments

€ billion

Item	2019	2020	
	Q4	Q3	Q4P
I. Current account	+67.8	+ 62.4	+ 72.3
1. Goods ¹	+51.9	+ 56.6	+ 56.0
2. Services ²	- 2.9	- 6.6	+ 3.9
3. Primary income	+31.1	+ 22.3	+ 29.9
4. Secondary income	-12.4	- 9.9	- 17.6
II. Capital account	- 1.0	- 1.0	- 2.2
III. Financial account (increase: +)	+92.8	+ 70.4	+ 92.7
1. Direct investment	+25.2	- 10.6	+ 10.8
Domestic investment abroad	+23.5	+ 17.9	+ 46.2
Foreign investment in the reporting country	- 1.7	+ 28.5	+ 35.3
2. Portfolio investment	+71.5	- 92.0	+173.4
Domestic investment in foreign securities	+32.8	+ 44.4	+ 68.2
Shares ³	+ 9.4	+ 18.9	+ 22.9
Investment fund shares ⁴ of which:	+20.9	+ 27.3	+ 30.7
Money market fund shares	+ 4.7	+ 11.7	+ 8.8
Short-term debt securities ⁵	- 2.0	- 0.9	- 1.9
Long-term debt securities ⁶ of which:	+ 4.4	- 0.8	+ 16.5
Denominated in euro ⁷	+ 3.8	- 18.5	+ 7.7
Foreign investment in domestic securities	-38.7	+136.4	-105.2
Shares ³	- 2.8	+ 0.7	- 1.0
Investment fund shares	+ 1.4	- 0.4	+ 1.8
Short-term debt securities ⁵	-17.0	+ 49.4	- 33.2
Long-term debt securities ⁶ of which:	-20.3	+ 86.6	- 72.9
Issued by the public sector ⁸	-18.0	+ 18.2	- 39.0
3. Financial derivatives ⁹	+ 1.8	+ 26.5	+ 8.6
4. Other investment ¹⁰	- 5.0	+147.8	-101.0
Monetary financial institutions ¹¹	+61.9	- 13.9	+ 23.9
Enterprises and households ¹²	+ 2.0	+ 62.2	- 13.1
General government	- 0.0	+ 12.1	- 1.0
Bundesbank	-69.0	+ 87.4	-110.8
5. Reserve assets	- 0.6	- 1.3	+ 0.8
IV. Errors and omissions ¹³	+26.0	+ 9.0	+ 22.7

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 Short-term: original maturity of up to one year. 6 Long-term: original maturity of more than one year or unlimited. 7 Including outstanding foreign D-Mark bonds. 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.

Deutsche Bundesbank

billion in the fourth quarter of 2020. Direct investment, too, led to capital outflows (€11 billion), with significantly larger intra-group loans once again being granted in both directions.

Direct investment sees net capital exports

Enterprises domiciled in Germany expanded their direct investment abroad by €46 billion in the final quarter of 2020 (previous quarter: €18 billion). Above all, they issued intra-group loans to their branches abroad on a much larger scale (€30½ billion). On balance, this occurred primarily through financial loans, driven mainly by domestic enterprises lending to affiliated enterprises abroad. Domestic subsidiaries, in particular, also provided additional funds to their foreign parent companies (“reverse investments”). Furthermore, domestic enterprises also boosted their equity in foreign firms (€16 billion). In the fourth quarter, direct investment was channelled to affiliates in the United States on a large scale (€24½ billion). In addition, there were also relatively high outflows of funds to Luxembourg (€7½ billion) and Sweden (€5½ billion).

German direct investment abroad results in capital exports

Foreign firms upped their direct investment in Germany by €35½ billion between October and December; in the third quarter, the volume of such investment had amounted to €28½ billion. This increase was predominantly due to higher investment in the form of equity capital (€15 billion) in domestic enterprises. However, as before, most of these funds were made available through intra-group lending (€20½ billion), which was primarily in the form of financial loans granted by affiliated enterprises abroad to their affiliates in Germany. A particularly large proportion of direct investment inflows in the fourth quarter came from the United States (€18 billion). There were also relatively high inflows of funds from Malta (€6½ billion), as well as from Sweden and the United Kingdom (€6 billion each).

Foreign direct investment in Germany generates capital inflows

■ List of references

Deutsche Bundesbank (2020), Recalculated weights for indicators of the German economy's price competitiveness, Monthly Report, August 2020, pp. 49-52.