### Financial markets

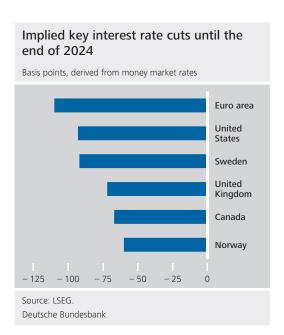
# Financial market environment

Expectations of declining inflation and sharper key interest rate cuts weigh on yields Activity in the international financial markets was shaped by greater confidence among market players that inflation in 2024 could globally recede faster than previously anticipated. In November and December 2023, they gradually revised their previous assessment that key interest rates in many currency areas, such as the United States and the euro area, would remain at high levels for an extended period of time ("higher-for-longer" interest rate scenario), and instead assumed earlier and sharper key interest rate cuts. Market participants' adjustment of their expectations was mainly driven by a significant fall in energy prices and by their hopes that disinflation would progress more rapidly than previously expected. The US Federal Reserve also sent early signals that it would probably be able to lower policy rates in 2024. Following the Federal Open Market Committee (FOMC) meeting in December, Fed Chair Jerome Powell expressed the view that interest rates in the United States had reached their peak, and that key interest rate cuts could follow in 2024. This contributed to an appreciation of the euro against the US dollar. US inflation was somewhat higher than expected in January, leading to a slight weakening of expectations of a cut in key interest rates. However, in view of the continued robustness of US macroeconomic data, emanating in particular from the labour market in the new year, investors' confidence in a "soft landing" of the US economy, concurrent with a decline in inflation, grew. In the euro area, some members of the ECB Governing Council indicated that they regard a cut in key interest rates in the summer as conceivable. Given the more optimistic inflation expectations and a relatively subdued economic outlook in the euro area, market participants anticipated significantly earlier and sharper key interest rate cuts than before. Both currency areas saw a significant decline in longterm nominal and real interest rates in this setting – a development which, coupled with a sustained robust risk appetite on the part of market players, resulted in significant price gains for risky assets.

#### Exchange rates

The euro appreciated against the US dollar on balance from the end of the third quarter of 2023. The main driver of this appreciation was firming expectations of a turnaround in US monetary policy. This view put pressure on the US dollar despite the expectation that key interest rates would also be cut in the euro area. While, taken in isolation, the relatively stronger economic outlook for the United States supported the US currency in 2024 – for instance, when surprisingly good gross domestic product (GDP) and labour market figures were published - exchange rate developments were dominated by the expectation of an interest rate reversal in the United States in the near future, causing the euro to appreciate overall. At the end of the reporting period, the euro was trading at US\$1.07, up 1.4% from its level at the end of September 2023.

Euro up against the US dollar ...





... and against the yen ...

The euro also appreciated against the yen on balance. This currency pair's exchange rate was also largely driven by expectations regarding monetary policy in the respective currency areas. The Japanese currency has been under pressure since the tightening cycle began in the euro area, as the Bank of Japan has maintained a negative interest rate policy despite inflation rates also rising in Japan. The euro even reached a 15-year high of ¥164 in mid-November. The single currency did not weaken against the yen until the aforementioned expectations of impending interest rate cuts emerged in the euro area and comments made by the Bank of Japan's Governor Kazuo Ueda at the beginning

Deutsche Bundesbank

of December were interpreted by market participants to mean that Japan could be on the verge of normalising its monetary policy. However, a severe earthquake in western Japan at the beginning of the year contributed to market participants lowering their expectations of monetary tightening in the near future. As a result, the euro appreciated again and stood at ¥161 at the end of the reporting period. This represents a net gain of 2.0% since the end of September last year.

The euro depreciated slightly against the pound sterling. As against the US dollar and the yen, the euro depreciated markedly against the UK currency at the end of November as participants in the foreign exchange market priced in the prospect of interest rate cuts for the euro area in the near future. However, the euro received temporary support from a set of economic data published for the United Kingdom in December showing weak growth and surprisingly low inflation. This fuelled the expectation that the Bank of England could also cut interest rates sooner than previously assumed. At the end of the period under review, the euro stood at £0.86, which was 1.0% lower than at the end of the third quarter of 2023.

... but down against the pound sterling

On a weighted average against the currencies of 18 major trading partners, the euro was virtually unchanged (-0.1%). While it was primarily supported by its gains against the US dollar, the currency depreciated against the złoty and the Swiss franc on balance.

Euro virtually unchanged in effective terms

#### Securities markets

#### **Bond** market

With the exception of Japan, nominal sovereign bond yields declined significantly in the major currency areas from the end of the third quarter of 2023. An important reason for this was also the change in market participants' expectations regarding interest rate developments. In this environment, yields on ten-year Yields on tenyear sovereign bonds down in euro area and United States US Treasuries fell significantly to 4.3% over the reporting period. The GDP-weighted yield on ten-year euro area bonds fell even more sharply to 2.9%. This comparatively steep decline reflects, on the one hand, expectations of a less restrictive monetary policy and the gloomier economic picture in the euro area. On the other, spillover effects from the United States are likely to have played a role in this sharp decrease in yields, too. In any case, this is what a model-based analysis suggests that breaks down interest rate movements into the historical contributions of individual shocks.

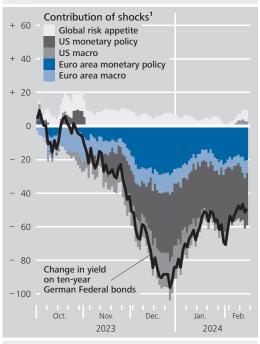
Decline in yields on ten-year Bunds In line with the yield on euro area bonds, yields on ten-year Bunds fell to 2.4%. The yield curve derived from yields on Federal securities shifted downwards almost uniformly during the period under review. The continued inversion of the yield curve, which is regarded as an empirical signal of market expectations that a recession will occur over the next 12 months, is therefore consistent with the gloomy economic outlook.¹ An estimated yield curve for real yields on Federal securities shows that real yields likewise fell during the period under review, especially in the long-term maturity segment. This indicates an expansionary impulse and, taken in isolation, more favourable financing conditions.

Global disinflation weighs on yields in other countries

Yields also fell in the United Kingdom and in other countries such as Canada and the Scandinavian countries, owing to market participants expecting a largely global disinflation process. In the United Kingdom, the yields on ten-year gilts fell by 48 basis points to 4.1% in the period under review. Yields on ten-year Canadian and Swedish sovereign bonds declined to a similar extent, while the decrease in Norwegian sovereign bond yields was somewhat smaller. In Japan, the Bank of Japan signalled that it believed the likelihood of achieving the inflation target of 2% sustainably was gradually increasing. At the same time, it maintained its very loose, and most recently somewhat more flexible, monetary policy of yield curve control, with the aim of keeping long-term yields close to 0%.2 In this environment, yields on ten-year

### Historical decomposition of ten-year German Federal bonds

Cumulated change since 30 September 2023 in basis points, daily data



Sources: LSEG and Bundesbank calculations. **1** Based on a VAR model with sign restrictions (see Brandt et al., 2021). Estimation period: January 1999 to August 2023.

Deutsche Bundesbank

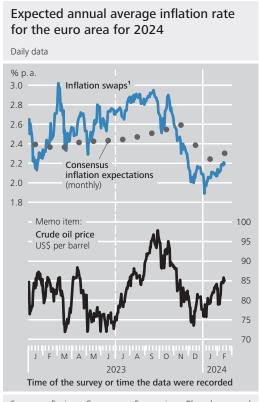
Japanese sovereign bonds remained virtually unchanged.

Yield spreads on euro area sovereign bonds narrowed further in view of market participants' increased hopes that there would be a rapid fall in key interest rates. Amid lower real interest rates and a significant increase in risk appetite, spreads on bonds issued by highly indebted governments, in particular, fell visibly. The ECB Governing Council's announcement that it would gradually reduce reinvestments under the pandemic emergency purchase programme (PEPP) over the second half of 2024 had no impact on the downward momentum of yield spreads. This was due, in part, to the fact that the pace proposed by the Eurosystem

Euro area yield spreads narrower

<sup>1</sup> See Deutsche Bundesbank (2023).

<sup>2</sup> The Bank of Japan recently loosened its yield curve control policy somewhat: at the end of July 2023, it raised the ceiling on ten-year sovereign bond yields by 50 basis points to 1%. At the end of October 2023, it decided that it would no longer apply this value as a rigid cap, but rather as a reference rate and thus more flexibly.



Sources: Fenics, Consensus Economics, Bloomberg and Bundesbank calculations. 1 Average of the monthly inflation fixing swaps due in 2024 indexed to the HCIP excluding tobacco for the euro area. Deutsche Bundesbank

for the reduction in PEPP bond holdings fell short of market participants' expectations. On balance, the yield spreads of ten-year Greek and Italian sovereign bonds over Bunds with the same maturity decreased by 38 and 42 basis points, respectively, from the end of September 2023. Overall, the yield spreads of tenyear sovereign bonds issued in the euro area over Bunds narrowed by 15 basis points (GDPweighted average).

Market participants expect inflation to fall rapidly to 2% by the end of 2024

Short-term inflation expectations based on inflation swaps fell significantly in the period under review. Market participants now expect annual inflation rates of 2.2% and 2.0% for 2024 and 2025, respectively, thus close to the Eurosystem's stability mark. At the end of September, they were still forecasting rates of 2.7% for 2024 and 2.3% for 2025. This was mainly due to energy prices falling on balance, which had a dampening effect overall on the market-based inflation path for 2024. Statistical office publications also revealed surprisingly

lower current inflation rates than expected, contributing in part to market participants adjusting their inflation outlook downwards. The markets are currently pricing in a somewhat faster return to the price stability objective than experts indicate in their survey responses. Expectations of comparatively sharper key interest rate cuts, which are based on market data (see p. 29), are thus in line with the expectations of a stronger decline in inflation.

Market-based inflation compensation for the euro area for a horizon of between five and ten years likewise fell (by around 0.3 percentage point to 2.3%) in the period under review, while survey-based inflation expectations for this period remained unchanged at 2.0%. Taken together, this suggests that although market participants have become more confident regarding the future development of inflation, they continue to believe there are greater upside than downside risks to inflation developments in the euro area over medium to longer-term horizons.

Market participants continue to hedge against longterm upside risks to inflation

In the United States, the short-term marketbased inflation outlook has also improved due to the downward trend in energy prices. Longer-term inflation indicators have fallen, too. However, actual inflation and the marketbased inflation outlook on the other side of the Atlantic are still well above the Fed's target of 2%. Relatively robust US economic data, which represent an upside risk to the inflation process in the United States, are likely to have contributed to this.

Inflation expectations in the United States down, but still elevated

Yields on BBB-rated European corporate bonds and high-yield bonds with residual maturities of between seven and ten years fell significantly in line with the decline in risk-free interest rates. Within this rating category, bond yields of financial corporations fell more sharply than those of non-financial corporations. Given the noticeably higher risk appetite, yield spreads over Bunds with the same maturity also narrowed in both the BBB segment and, above all, in the high-yield segment. Thus, measured by

Corporate bond yields down significantly

yield spreads, financing costs for European enterprises in all rating categories are currently close to or below their respective five-year averages. This is noteworthy given that these average values have been shaped not only by the coronavirus pandemic and the war in Ukraine, but also by quantitative easing and the effective lower bound regime.

#### **Equity market**

International equity markets with noticeable price gains The international equity markets were characterised by the decline in risk-free interest rates and investors' increased appetite for risk, which boosted prices considerably. In the United States, prices were also supported by many investors' expectations of a "soft landing" for the US economy. Market participants interpreted signs of a stable economy, such as robust labour market data, as a factor weighing on equity prices in some cases, due to concerns that favourable economic signals could prevent the Fed from cutting interest rates quickly. Ultimately, however, these concerns proved to be short-lived, especially since the robust macrodata were also reflected in higher earnings expectations that supported equity prices. Even intermittent concerns about an escalation of the geopolitical situation in the Middle East ultimately had no visibly dampening effect on equity prices. Shares in technology companies, which have a high weighting on the US equity market, recorded above-average price gains. As a general rule, investors in these companies expect favourable long-term prospects, meaning that they benefit in particular from lower riskfree interest rates. Moreover, some technology companies were boosted by investors' hopes of advances in the use of artificial intelligence (AI). Among these companies were manufacturers of computer chips with the high computing capacities required for AI programmes.

The decline in risk-free interest rates and the robust appetite for risk likewise fuelled significant equity price gains in the euro area. However, these gains were lower than those re-

## Forward inflation rates\* and expectations in the euro area and the United States

% p.a., weekly averages



Sources: Bloomberg, LSEG, Consensus Economics and Bundesbank calculations. \* Derived from the fixed cash flow arising from inflation swaps which is swapped for the actual annual inflation rates (HICP excluding tobacco for the euro area and CPI Urban Consumers for the United States) realised over the next five or ten years.

Deutsche Bundesbank

corded in the United States. One important reason for this was the comparatively unfavourable economic outlook, which was reflected in downward revisions of earnings expectations, dampening the upward trend in equity prices. On balance, the prices of European equities (EURO STOXX) and German equities (CDAX) have risen by 10.8% and 9.1%, respectively, since the end of the third quarter of 2023. Equity prices in the United Kingdom (FTSE 100) remained virtually unchanged (-0.1%), as some commodity stocks included in the index weighed on price developments. By contrast, US equities (S&P500) and Japanese equities (Nikkei index) posted gains of 17.3% and 19.8%, respectively.

Some European and US bank stocks recorded strong price gains in the period under review. The prices of US bank stocks were clearly buoyed by growing confidence that the US economy could be heading for a "soft landing" rather than a recession. On balance, the prices

Banks on both sides of the Atlantic record gains

Equity price gains in Europe lower than in the United States



of European and US bank stocks rose by 6.2% and 25.0%, respectively, as compared with the end of September 2023.

US equity valuations have remained nearly constant since the end of the third quarter of 2023, while valuations for European equities have risen slightly, as indicated by the decrease in earnings yields and the implied cost of equity of European equities. The implied cost of equity is derived from a dividend discount model that also takes into account enterprises' mediumterm earnings outlook and the path of risk-free interest rates. In view of the diverging economic outlook on either side of the Atlantic, the regions' medium-term earnings prospects developed differently. Analysts revised their forecast for European enterprises somewhat downwards, which had a dampening effect on share price developments. Meanwhile, they raised their forecast for US enterprises. In a long-term comparison, the implied cost of equity and, in particular, the equity risk premia indicate a relatively high valuation for European and US equities overall.

Slight rise in equity market valuations

#### List of references

Deutsche Bundesbank (2023), Term structures in economic analysis, Monthly Report, January 2023, pp. 53-74.