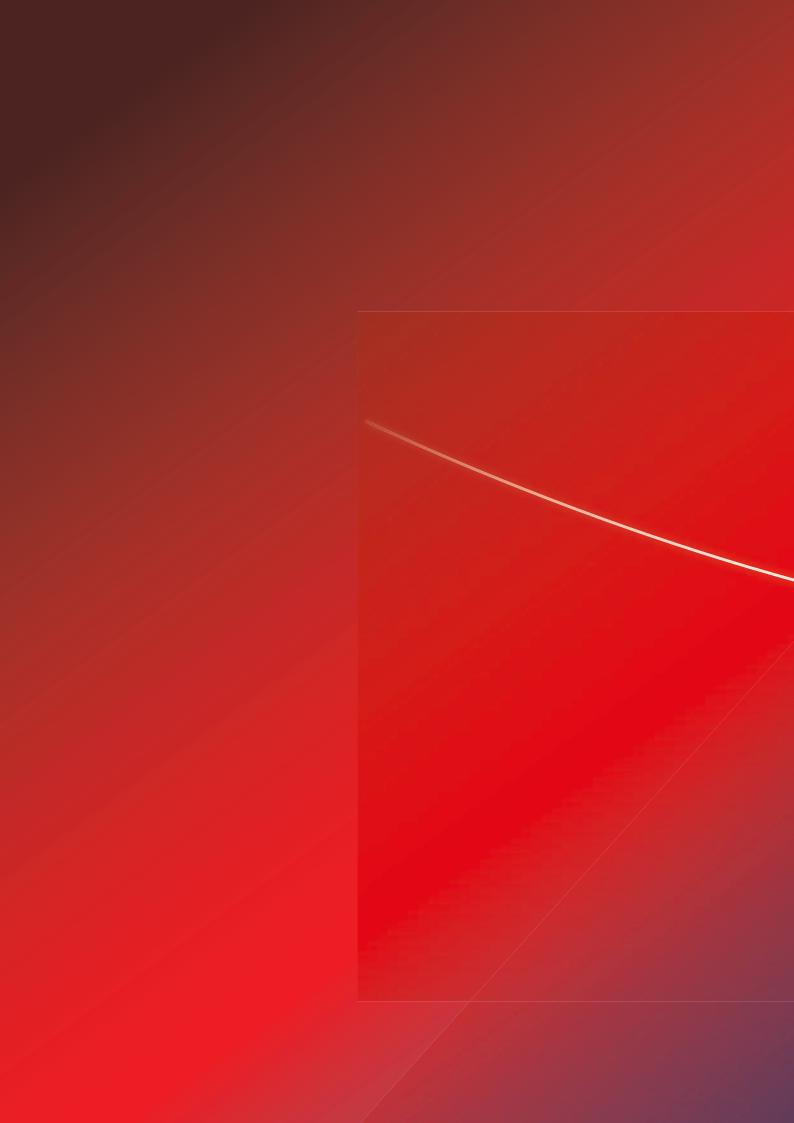
2024 Half-Yearly Financial Report as at 30 June 2024

Unlocking transformation, together.

For our clients, our people, and our communities.





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This edition of our half-yearly financial report is prepared for the convenience of our English-speaking readers. It is based on the German original, which takes precedence in all legal respects.

Financial Highlights

Key performance indicators

	1/1-30/6/2024	1/1-30/6/2023
Net operating profit	€1,554m	€1,398m
Cost-income ratio (ratio of operating costs to operating income, based on segmented income statement)	39.2%	41.5%
Profit before tax	€1,574m	€1,340m
Consolidated profit	€1,067m	€1,021m

Balance sheet figures/Key capital ratios

	30/6/2024	31/12/2023
Total assets	€282,402m	€283,292m
Shareholders' equity	€19,274m	€19,940m
Common Equity Tier 1 capital ¹	€15,821m	€15,864m
Core capital (Tier 1 capital) ¹	€17,521m	€17,564m
Risk-weighted assets (including equivalents for market risk and operational risk)	€68,044m	€69,767m
Common Equity Tier 1 capital ratio ^{1,2}	23.3%	22.7%
Core capital ratio (Tier 1 ratio) ^{1,2}	25.7%	25.2%
Leverage ratio ^{1,3}	5.6%	5.7%

^{1 31} December 2023: in accordance with approved financial statements.

Other information

	30/6/2024	31/12/2023
Employees (in FTEs)	9,689	9,620
Branch offices	366	371

 $^{{\}small 2\ \ Calculated\ on\ the\ basis\ of\ risk-weighted\ assets,\ including\ equivalents\ for\ market\ risk\ and\ operational\ risk.}$

³ Ratio of core capital to the sum total of the exposure values of all assets and off-balance-sheets items.

Corporate Structure and Business Model

Legal corporate structure and organisation of management and control

In the first half of 2024, the legal corporate structure and the organisation of management and control remained unchanged compared with year-end 2023. Information on this can be found in the "Corporate structure" section of the 2023 Combined Management Report. Only the number of members on the Executive Board increased from six to seven as of 1 March 2024 and from seven to eight as of 1 April 2024. This figure will increase from eight to nine as of 1 July 2024.

Supervisory Board

Mr Thomas Schöner resigned as an employee representative on the Supervisory Board with effect from the end of 30 April 2024. He was succeeded by Ms Sonia Nassar by court appointment with effect from 17 June 2024.

Executive Board

Due to the expiry of their appointments, Ms Monika Rast resigned with effect from the end of 29 February 2024 and Dr Jürgen Kullnigg with effect from the end of 31 March 2024.

With effect from 1 March 2024, Ms Georgiana Lazar-O'Callaghan took over the newly established People & Culture area and Mr René Babinsky the Private Clients area.

As of 1 April 2024, Mr Marco lannaccone took over the Client Solutions area and Mr Pierpaolo Montana the Risk Management area as the Chief Risk Officer.

As of 1 July 2024, the Corporates area was divided into the Large Corporates and Small and Medium Corporates areas, which were taken over by Ms Marion Bayer-Schiller and Mr Martin Brinckmann respectively.

Mr Pierpaolo Montana assumed responsibility for AML compliance in accordance with Section 4 (3) of the German Money Laundering Act (Geldwäschegesetz, GwG) with effect from 1 July 2024.

Mr Jan Kupfer resigned with effect from the end of 30 June 2024.

The members of the Supervisory Board and Executive Board of HVB are listed in the notes to the consolidated financial statements of this Half-yearly Financial Report in the notes "Members of the Supervisory Board" and "Members of the Executive Board".

UniCredit Unlocked

We will continue to follow the guidelines of our UniCredit Unlocked strategic plan in the 2024 financial year. This multi-year plan is embedded in the UniCredit Unlocked group-wide strategic plan and aims at boosting profitability and capital efficiency.

Corporate acquisitions and sales, and other major changes in the group of companies included in consolidation

No significant corporate acquisitions or disposals were made in the reporting period.

The scope of consolidation of HVB Group was reduced by a total of four companies as at 30 June 2024 compared with year-end 2023.

Further or more detailed information on changes in the group of companies included in consolidation can be found in the Note "Companies included in consolidation" in the notes to the consolidated financial statements.

Economic Report

Underlying economic conditions

Economic growth ¹	First half 2024 ²	Full year 2023	Main drivers of development in the first half of 2024 ³
Global economy	3.1%4	3.2%	Higher real interest rates have tended to weigh on the global economy while labour markets remained relatively robust in many industrial countries. Global trade recovered somewhat. In contrast to the eurozone, inflation rates in the USA did not fall any further on average. Due to geopolitical tensions in the Middle East, freight costs by sea increased, particularly between China and Europe. Despite this, severe supply bottlenecks did not occur.
Eurozone countries	0.5%	0.6%	The economy in the eurozone saw moderate growth due to a slight decline in inflation rates and robust labour markets coupled with higher wages. The ECB lowered key interest rates by 25 basis points in June.
including: Germany	(0.1%)	(0.2%)	The moderate recovery in global trade bolstered export-dependent industry, while consumer spending was weak. Growth in employment on the labour market slowed somewhat.
USA	3.0%	2.5%	Compared with the ECU, the US economy held up better, not least due to stronger consumer spending.

- 1 Change in real GDP (in % compared with the previous year).
- 2 Sources: national authorities, UniCredit research forecasts.
- 3 Assessment of the development in the first half of 2024 on the basis of estimated figures.
- 4 Source: full year value expected by UniCredit Research (figures for first half of 2024 are not available).

Sector-specific developments

The inflation rate fell in the eurozone in the first half of 2024, resulting in the first interest rate cut by the European Central Bank (ECB) in June 2024. There were no further interest rate hikes by the ECB after September 2023. For the second half of 2024, market participants expect the ECB to lower interest rates further. The ECB will also be looking to press ahead with reducing its balance sheet total. From March 2023, the ECB began to reduce its net asset purchases under the asset purchase programme (APP) by €15 billion per month. Since July 2023, maturities under the APP portfolio are no longer being reinvested, which since then has resulted in a reduction of around €28 billion per month. As at June 2024, the ECB still held bonds totalling €2.8 trillion in its APP portfolio compared with €3.0 trillion as at year-end 2023. The ECB also ended net purchases under its second purchase programme, the pandemic emergency purchase programme (PEPP), on 1 July 2022. In addition, the ECB announced in December 2023 that it would be reducing the PEPP portfolio by €7.5 billion from July 2024 and would not be reinvesting all the PEPP maturities any further from January 2025. The PEPP is a programme comprising public sector and private assets currently totalling €1.7 trillion. Due to the increase in credit spreads for the government bonds of peripheral countries, the ECB decided to establish a new transmission protection instrument (TPI) in July 2022. The ECB Governing Council considers it necessary to establish the TPI to support the effective transmission of monetary policy. The TPI supplements the ECB Governing Council's raft of instruments. This allows government bonds to be purchased to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the eurozone. Since the TPI was introduced in 2022, there has been a significant decline in credit spreads for the sovereign bonds of peripheral countries.

On the regulatory side, an agreement was reached in 2023 on the implementation of the Basel III reforms (also known as Basel IV) in Europe. At the end of May 2024, the Council of the European Union adopted the new rules as the final step in the adoption procedure. The rules were published in the Official Journal of the EU in June 2024. The Member States have a period of 18 months to transpose the directive into national law. The directive applies as of 1 January 2025. A key element is what is known as the output floor (lower limit of capital requirements) that limits the risk of excessive reductions in banks' capital requirements and makes those requirements more comparable. Consensus was reached on transitional arrangements in order to give market participants sufficient time to make adjustments. As special regulations, the agreement envisages long transitional periods for risk positions vis-à-vis companies without an external credit rating and housing loans collateralised by real estate.

The Basel III reforms will be introduced in Europe at the beginning of 2025, which means that risk weightings and risk-weighted assets for banks will gradually increase from 2025 onwards. Furthermore, the EU postponed the commencement of stricter rules for trading activities by one year until 1 January 2026 in response to the delayed implementation in other jurisdictions in order to avoid creating a competitive disadvantage for European banks.

In April 2023, the European Commission proposed a comprehensive legislative package for reforming bank resolution and deposit guarantee schemes. In this context, the Commission proposes adjustments to the bank crisis management framework and deposit insurance to safeguard financial stability and manage bank failures in an orderly and economically efficient manner. With this project, the Commission intends to further harmonise deposit guarantee schemes in the EU that have been structured differently up until now. However, no significant progress has been made since 2023.

A little over a year after the 7th amendment to the Minimum Requirements for Risk Management (MaRisk), BaFin published the 8th MaRisk amendment in May 2024. The amendment implements the guidelines of the European Banking Authority which became fully effective at the end of 2023 and focuses on the management of interest rate risks and credit spread risks in the banking book.

European banks must meet the minimum requirements for own funds and eligible liabilities (MREL) from January 2024 onwards. Overall, the banks had already largely met the requirements at the end of 2023 (Single Resolution Board, SRB).

Risk premiums on corporate bonds in the European credit market moved sideways for the most part in the first half of 2024, narrowing only marginally by 3 basis points. By contrast, risk premiums on senior bank bonds narrowed significantly by 15 basis points in the same period. This means that the risk premiums of corporate and bank bonds are again at a comparable level. The good performance of banks reflects the continuing excellent profitability in the sector, the good asset quality and the continuing high capitalisation. In the market for sovereign bonds, the spread between ten-year Italian sovereign bonds and German sovereign bonds narrowed significantly from 168 basis points at the end of 2023 to 134 basis points at the beginning of July. In particular, retail and foreign investors increasingly emerged as buyers of Italian sovereign bonds. Only in June 2024 was there a widening of risk premiums on French sovereign bonds due to early elections for the parliament in France that also had an adverse effect on Italian sovereign bonds. However, following the election results in France, a countermovement was seen in July and risk premiums decreased again.

The three-month Euribor fell in the first half of 2024 from 3.9% at year-end 2023 to 3.7% in mid-2024 while the EUR swap rate with 10-year maturity increased from a level of around 2.5% to 2.8% in the same period. As expectations of interest rate cuts in the second half of the year have become stronger, it can be assumed that the currently inverse yield curve will steepen again. The high level of interest rates continues to support the net interest income of banks. The market is currently expecting further interest rate cuts in 2024, although there is still considerable uncertainty about the continued trend in interest rates. In the first half of 2024, the bond market continued to show a very high level of fluctuation. In the USA, the yield on ten-year US treasury bonds rose from 3.9% at the end of 2023 to 4.4% at the end of June 2024. The yield on ten-year bonds of the Federal Republic of Germany likewise increased from 2.1% at year-end 2023 to 2.5% as at the end of June 2024.

Economic Report (Continued)

Lending was down in the first half of 2024. New business with real estate loans remained under pressure from the significant increase in interest rates and the sharp rise in construction costs. In Germany, the volume of new business with housing loans extended to private households in the first five months of 2024 was 43% lower than the level in 2023. As regards lending to the business sector, the last ECB survey on lending in April 2024 showed continuing restraint in demand for corporate loans. The higher general level of interest rates and the reluctance of businesses to invest in fixed assets continued to curb the demand for credit, especially for long-term loans. At the same time, loan terms in the corporate banking business were only slightly more restrictive.

The stock markets continued to perform well again in 2024 despite high geopolitical risks due to the decline in inflation in the USA and in Europe and an above-average performance of shares relating to digitalisation and artificial intelligence. Moreover, corporate profits continued to develop favourably. The EURO STOXX 50 rose by more than 8% in the first half of 2024. From February 2024, bank shares performed better than the overall market. In the first six months, the German DAX stock index was up by 9% and in the USA the S&P 500 even gained 15%.

In July 2024, the European Central Bank presented the results of its stress test for cyber resilience. In this context, the focus was not on whether banks can prevent a cyber attack but how they respond to an attack and restore their business operations. Only aggregated data was published on this. Overall, the stress test showed that banks have response and recovery frameworks in place. However, the ECB still sees a need for improvement in some areas.

The topic of sustainability continues to be of major importance in the banking sector. On the one hand, the share of ESG-compliant issues in the banking sector remained at a high level. Around 20% of the senior bonds issued in the banking sector in 2024 were placed in line with ESG standards. On the other hand, banks worked on further sustainability goals and data, in particular regarding the CO2 intensity of the credit book. In addition, banks had to disclose their green asset ratio (GAR) as a new taxonomy and key figure for the first time in 2024.

Operating performance of HVB Group

All the statements regarding the operating performance of HVB Group in this Interim Management Report refer to the structure of the following income statement.

	1/1-30/6/2024	1/1-30/6/2023	CHANG	GE
INCOME/EXPENSE	€ millions	€ millions	€ millions	in %
Net interest	1,271	1,405	(134)	(9.5)
Dividends and other income from equity investments	27	24	3	12.5
Net fees and commissions	670	647	23	3.6
Net trading income	941	769	172	22.4
Net gains/(losses) on financial assets and liabilities at fair value	(78)	29	(107)	n/a
Net gains/(losses) on derecognition of financial instruments measured at cost	(1)	(2)	1	(50.0)
Net other expenses/income	37	(148)	185	n/a
of which net valuation/disposal of investment properties	(10)	7	(17)	n/a
OPERATING INCOME	2,867	2,724	143	5.2
Payroll costs	(612)	(665)	53	(8.0)
Other administrative expenses	(525)	(532)	7	(1.3)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(44)	(79)	35	(44.3)
Operating costs	(1,181)	(1,276)	95	(7.4)
OPERATING PROFIT/(LOSS)	1,686	1,448	238	16.4
Net write-downs of loans and provisions for guarantees and commitments	(132)	(50)	(82)	> 100.0
NET OPERATING PROFIT/(LOSS)	1,554	1,398	156	11.2
Provisions for risks and charges	20	(13)	33	n/a
Restructuring costs	2	(45)	47	n/a
Net gains/(losses) on remeasurement of consolidated companies	(2)	_	(2)	n/a
PROFIT/(LOSS) BEFORE TAX	1,574	1,340	234	17.5
Income tax for the period	(507)	(319)	(188)	58.9
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	1,067	1,021	46	4.5
attributable to the shareholder of UniCredit Bank GmbH	1,067	1,021	46	4.5
attributable to minorities	_	_	_	n/a

Economic Report (CONTINUED)

Net interest

In the reporting period, net interest comes to €1,271 million compared with €1,405 million in the previous-year period and is thus noticeably lower by €134 million (down 9.5%) on the previous-year figure. The reduction in net interest is primarily due to the rise in refinancing costs for trading activities within the Corporates operating segment. A positive counter-effect can be seen in net trading income.

Dividends and other income from equity investments

Dividends and other income from equity investments totalled €27 million in the reporting period and are thus noticeably higher than in the previous-year period (€24 million).

Net fees and commissions

In the reporting period, net fees and commissions came to €670 million and are thus a moderate €23 million (3.6%) higher compared with the previous-year period. This is largely due to an increase in fee and commission income in the lending business of the Corporates operating segment and in guarantees as well as to the rise in net fees and commissions in securities services for customers in the Retail operating segment.

Net trading income

In the reporting period, net trading income was up a significant €172 million (22.4%) to €941 million. The total result was driven particularly by increasing income from business in the area of equity products. Furthermore, a rising, high level of market interest rates is leading to further trading income with a corresponding countereffect seen in net interest.

Net trading income includes valuation discounts in the context of the fair value measurement of derivatives, particularly credit value adjustments and funding value adjustments. The reduction in valuation discounts in connection with the fair value measurement had a positive impact and resulted in income of €18 million. In the previous-year period, this income totalled €43 million.

Net gains/losses on financial assets and liabilities at fair value

A net loss of €78 million on financial assets and liabilities at fair value was recognised for the reporting period. A net gain of €29 million was generated in the previous-year period.

There was a significant decline in hedge accounting effects. In the reporting period, a loss of €150 million was generated after a gain of €32 million in the previous-year period. This development is mainly attributable to changes in the fair values of hedging transactions and hedged items in an environment with EUR interest rates rising further. There were no hedge inefficiencies with a material impact. Thus, for the portfolio fair value hedges as HVB Group's main hedge relationship, the change in the fair values resulted in a rise from minus €426 million in the previous-year period to €144 million in the reporting period for the hedged items whereas for hedging transactions, this resulted in a decline from €462 million in the previous-year period to minus €220 million in the reporting period.

In the reporting period, a net gain of €71 million was reported for financial liabilities designated at FVTPL compared with a net loss of €9 million in the previous-year period. The positive change in the derivatives used for economic hedging exceeds the negative change in the value of the securities issued.

In the reporting period, a loss of €31 million was generated on financial assets mandatorily at FVTPL compared with a loss of €11 million in the previous-year period. In this case, the negative contributions from securities were not compensated for by contributions from derivatives concluded for economic hedging.

This item also includes the significant increase in the fair value measurement of equity instruments at a positive amount of €27 million compared with the €17 million in the previous-year period.

Net gains/losses on derecognition of financial instruments measured at cost

This item reported a loss of €1 million for the reporting period (previous-year period: loss of €2 million).

Net other expenses/income

The item "Net other expenses/income" generated net income of €37 million in the reporting period, which is thus a significant increase on the negative balance of expenses/income in the previous-year period totalling a net expense of €148 million.

The significant change is primarily due to the elimination of the expense of €179 million for the bank levy in 2023. In February 2024, the Single Resolution Board announced that it would not be charging CRR financial institutions any ex-ante contributions in 2024 as the financial means available in the Single Resolution Fund had reached the target level of at least 1% of the covered deposits.

Operating costs

Operating costs totalled €1,181 million in the reporting period and are thus €95 million, or 7.4%, lower than the previous-year figure of €1,276 million. This shows that HVB Group has continued to succeed in reducing costs in line with the UniCredit Unlocked strategic plan and in combating the effects of inflation at the same time.

Payroll costs declined noticeably by €53 million to €612 million (down 8.0%) in the reporting period compared with €665 million in the previous-year period, especially against the backdrop of lower staffing levels. As a result, there was a decline in the costs for wages and salaries. Other administrative expenses totalled €525 million in the reporting period and remained almost unchanged compared with the previous-year period at €532 million (down 1.3%).

Depreciation, amortisation and impairment losses on property, plant and equipment, software and right-of-use assets fell a significant €35 million to €44 million in the reporting period compared with €79 million in the previousyear period. In the previous-year period, the amount was mainly attributable to unscheduled write-downs on properties owned and occupied by the Bank as a result of a decline in market values.

Economic Report (Continued)

Operating profit (before net write-downs of loans and provisions for guarantees and commitments)
Operating profit (before net write-downs of loans and provisions for guarantees and commitments) amounted to
€1,686 million in the reporting period, which represents a significant rise of €238 million (16.4%) over the previousyear figure of €1,448 million.

The cost-income ratio (ratio of operating costs to operating income) is based on the segmented income statement, which is relevant for the corporate management and planning of HVB Group, improved moderately to 39.2% in the reporting period after 41.5% in the previous-year period and is thus in line with the projected moderate improvement. The segmented income statement used for the cost-income ratio is shown in the Note "Income statement, broken down by operating segment".

Net write-downs of loans and provisions for guarantees and commitments

In the reporting period, net additions to net write-downs of loans and provisions for guarantees and commitments totalled €132 million after net additions of €50 million to net write-downs of loans and provisions for guarantees and commitments in the previous-year period. The individual effects that offset each other are described below.

In the reporting period, a net amount of €156 million in portfolio allowances (general loan loss provisions - GLLP) was reversed following a net reversal of €31 million in the previous-year period. The models used to calculate expected credit losses generally reflect effects from the adjustment of macroeconomic factors. In addition, overlays were applied in 2022 and 2023 for certain sub-portfolios that are particularly sensitive to specific risks. These overlays are to be considered supplementary measures to the expected loss models. On the one hand, these specific risks are geopolitical risks caused by the sudden increase in energy costs, inflation and interest rates for both companies and private individuals. On the other hand, these are risks that have arisen especially in the commercial real estate and construction industry (CRE) as a result of the persistently high level of interest rates.

In the reporting period, there were reversals in both overlays through a shift to specific loan loss allowances and a methodological adjustment regarding the exit from the overlays. A further reversal was the result of an updated calibration of the forward-looking macroeconomic scenarios for local corporate customers. When technically implemented, the planned substitution of the applied post-model adjustment by the new LGD model led to a reversal of GLLPs as the actual effects of implementing the model were smaller than those estimated in the post-model adjustment.

A reversal also resulted from regular portfolio development. In terms of the macroeconomic situation, a slight deterioration in the outlook has resulted in additions to the GLLPs.

In the reporting period, net additions to specific loan loss provisions totalled €288 million (including net additions to generalised specific loan loss allowances in the course of implementing the new LGD model) after net additions of €81 million in the previous-year period. Additions to specific loan loss provisions on account of defaults were only partly compensated for by reversals of existing specific loan loss provisions.

Provisions for risks and charges

In the reporting period, net income of €20 million was generated from the reversal of provisions for risks and charges. In contrast, there was a net expense of €13 million from the addition to provisions for risks and charges reported in the previous-year period. No individual items of significance occurred in the reporting period or in the previous-year period.

Restructuring costs

The item "Restructuring costs" reports net income from the reversal of a provision no longer required in the amount of €2 million for the reporting period (previous-year period: net expense of €45 million). The expense in the previous-year period was attributable to the assumption of the pro rata costs for restructuring measures of UniCredit S.p.A. by HVB Group relating to the group-wide service offering of IT activities and other group-wide administrative activities.

Profit before tax, income tax for the period and consolidated profit/loss

In the reporting period, HVB Group generated profit before tax of €1,574 million, which is a significant €234 million (17.5%) higher than the profit before tax of €1,340 million generated in the previous-year period.

Income tax expense amounted to €507 million in the reporting period and is therefore significantly higher by €188 million (58.9%) than the income tax expense of €319 million for the same period in the previous year. The rise is primarily due to the taxation of the higher result in the reporting period. The lower tax expense in the previous year was also attributable to positive tax effects for previous years following the revaluation of tax risks.

After deducting income tax for the period, HVB Group generated a consolidated profit of €1,067 million in the reporting period, which is a moderate €46 million (4.5%) higher than the consolidated profit of €1,021 million in the previous-year period.

The forecast made in the 2023 Annual Report of a significant increase in profit before tax for the 2024 financial year was confirmed in the first half of 2024. We can continue to confirm our forecast of a significant increase in profit after tax for the 2024 financial year. However, this was not yet apparent in the first half of 2024 as profit after tax in the comparative period in 2023 benefitted from positive non-recurrent effects.

Return on allocated capital

The profitability ratio return on allocated capital (RoAC) shows the annualised consolidated profit of HVB Group in relation to allocated capital. With RoAC, allocated capital is determined on the basis of the average risk-weighted assets (including equivalents for market risk and operational risk) whereby 13.00% equity is allocated to the average risk-weighted assets. In the reporting period, this ratio rose to 21.5% after 18.7% in the previous-year period. This increase is due to an improved consolidated profit coupled with lower risk-weighted assets.

The RoAC is thus noticeably higher than the figure recorded in the previous-year period and only slightly lower than the forecast of a significant rise in full year 2024 compared with full year 2023.

Economic Report (Continued)

Segment results by operating segment

The structure of the income statement used for internal management purposes is shown; any deviations to the presentation of the operating performance are described in detail in the "Segment reporting" section of the consolidated financial statements. When calculating totals, minor deviations might occur as a result of rounding.

OPERATING INCOME (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Retail	829	828
Corporates	1,866	1,915
Other	171	150
Total	2,866	2,892

NET OPERATING PROFIT/(LOSS) (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Retail	376	314
Corporates	1,097	1,216
Other	136	102
Total	1,608	1,633

PROFIT/(LOSS) BEFORE TAX (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Retail	356	272
Corporates	1,092	998
Other	120	64
Total	1,568	1,334

PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS)) (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Retail	245	199
Corporates	735	736
Other	82	80
Total	1,063	1,015

Financial situation

Total assets

The total assets of HVB Group came to €282.4 billion as at 30 June 2024 after €283.3 billion as at 31 December 2023 and, declining by €0.9 billion or 0.3%, thus remained virtually unchanged compared with year-end 2023.

On the assets side, cash and cash balances fell significantly by €12.5 billion and amount to €10.8 billion as at the reporting date compared with €23.3 billion as at year-end 2023. This decline is due to lower credit balances with central banks (down €12.5 billion), in particular as a result of the final repayment of TLTRO-III funds (down €5.8 billion). Credit balances with central banks amount to €10.4 billion as at the reporting date compared with €22.9 billion as at 31 December 2023.

At €69.6 billion as at 30 June 2024, financial assets held for trading are up by €1.0 billion or 1.5% and thus virtually unchanged compared with €68.6 billion as at year-end 2023.

The portfolio of financial assets at FVTPL, which consists mainly of securities, increased noticeably by €0.4 billion, or 11.1%, to €3.6 billion as at the reporting date compared with year-end 2023. The key factor driving this development is the significant rise of €1.0 billion to €1.8 billion in loans and promissory notes (year-end 2023: €0.8 billion). A countermovement was seen in fixed-income securities, which were down by a significant €0.6 billion to €1.0 billion.

The volume of financial assets at FVTOCI, which consists exclusively of securities, increased a significant €3.3 billion to €12.6 billion compared with year-end 2023 (€9.3 billion). This increase is primarily due to changes in holdings through additional purchases of securities.

Loans and receivables with banks increased noticeably by €2.5 billion to €22.1 billion in the reporting period. This is attributable to the significant increase in other loans to banks (up €1.1 billion to €2.5 billion) and in securities (up €1.9 billion to €8.0 billion).

Loans and receivables with customers increased moderately by €4.7 billion to €159.2 billion. This development is largely due to the significant increase of €1.3 billion to €2.3 billion in reverse repos and the noticeable increases of €1.1 billion to €8.7 billion in current account balances and of €2.5 billion to €31.6 billion in securities.

On the liabilities side, the item "Deposits from banks" was noticeably up by €3.5 billion, or 9.9%, to €39.2 billion as at the reporting date (year-end 2023: €35.7 billion). This increase compared with year-end 2023 is attributable to the development of deposits from banks (up €6.4 billion; within this total: repos (up €4.9 billion) and term deposits (up €1.0 billion)). With a significant decline of €2.9 billion, a countermovement was seen in deposits from central banks. As at the balance sheet date, deposits from central banks no longer include any deposits from the participation in the TLTRO -III programme.

Economic Report (CONTINUED)

Compared with year-end 2023, deposits from customers, which were down by €2.8 billion to €136.8 billion, remained virtually unchanged. The reduction in current accounts (down €6.6 billion) and savings deposits (down €1.7 billion) is largely offset by the rise in repos (up €5.2 billion) and other liabilities (up €0.5 billion).

Down by €0.8 billion to €33.5 billion, debt securities in issue remained virtually unchanged compared with year-end 2023.

With an increase of €0.2 billion to €48.7 billion, financial liabilities held for trading remained virtually unchanged compared with year-end 2023 (€48.5 billion).

At €4.2 billion as at the reporting date, financial liabilities at FVTPL, which primarily contain own structured issues, fell noticeably compared with 31 December 2023 (€4.7 billion).

Shareholders' equity shown in the balance sheet was down a moderate €0.7 billion to €19.3 billion as at the reporting date. This development is largely due to the distribution of the profit available for distribution of €1.7 billion as at 31 December 2023. The distribution is partly compensated for by the consolidated profit of €1.1 billion as at the reporting date.

Further and more detailed information on the individual items in the balance sheet is contained in the "Notes to the Balance Sheet" and in "Other Information" in the notes to the consolidated financial statements.

Contingent liabilities and other commitments not recognised in the balance sheet totalled €137.7 billion as at the reporting date compared with €135.8 billion at year-end 2023. This figure includes contingent liabilities in the form of financial guarantees of €29.7 billion (year-end 2023: €29.7 billion) and other commitments of €108.0 billion (year-end 2023: €106.0 billion) related to irrevocable and revocable credit commitments. These contingent liabilities are offset by contingent assets of the same amount.

Risk-weighted assets, key capital ratios and leverage ratio of HVB Group and liquidity ratios of HVB The total risk-weighted assets of HVB Group (including market risk and operational risk) determined in accordance with the Capital Requirements Regulation (Kapitaladäquanzverordnung – CRR II) amounted to €68.0 billion as at 30 June 2024 and were thus €1.8 billion lower than as at year-end 2023 (€69.8 billion), also as a result of continued measures to increase capital efficiency in line with the group-wide UniCredit Unlocked strategic plan. Risk-weighted assets for credit risk (including counterparty default risk) fell by €0.9 billion to €56.1 billion, partly due to lower exposure. Risk-weighted assets for market risk were down by €0.5 billion and came to €3.8 billion. Furthermore, risk-weighted asset equivalents for operational risk declined by €0.4 billion to €8.1 billion.

As at 30 June 2024, Common Equity Tier 1 capital compliant with the CRR II excluding hybrid capital (CET1 capital) totalled €15.8 billion and Tier 1 capital €17.5 billion. Tier 1 capital decreased slightly compared with yearend 2023 (€17.6 billion in accordance with approved consolidated financial statements). The CET1 capital ratio (ratio of Common Equity Tier 1 capital to the total amount of credit risk-weighted assets and risk-weighted asset equivalents for market risk and operational risk) and the Tier 1 capital ratio under the CRR II (including market risk and operational risk) were 23.3% and 25.7% respectively as at 30 June 2024 (31 December 2023: 22.7% and 25.2% respectively). Own funds came to €18.9 billion as at 30 June 2024 (31 December 2023: €18.9 billion in accordance with approved consolidated financial statements). The own funds ratio was 27.8% as at 30 June 2024 (31 December 2023: 27.1%). The increase in the ratios is attributable to the decrease in risk-weighted assets.

The leverage ratio is determined by dividing the Tier 1 capital measure by the total exposure measure. The total exposure measure is the sum total of the exposure values of all assets and off-balance sheet items. The leverage ratio of HVB Group came to 5.6% as at 30 June 2024 (31 December 2023 in accordance with approved consolidated financial statements: 5.7%) and is thus significantly higher than the minimum requirement of 3.0%.

The liquidity coverage ratio (LCR) is calculated as the ratio of high-quality liquid assets to total net cash flows. HVB's LCR amounted to 141% on a twelve-month average as at 30 June 2024 (31 December 2023: 148%). The required LCR of a minimum of 100% to ensure that an institution is able to meet its short-term payment obligations was also consistently observed in the course of 2024 at the level of the combined liquidity sub-group consisting of UniCredit Bank GmbH and UniCredit Leasing Finance GmbH.

The net stable funding ratio (NSFR) is calculated as the ratio of the amount of available stable funding to the amount of required stable funding. The valid NSFR requirement of a minimum of 100% to ensure the availability of a reasonable share of stable funding was consistently met in the course of 2024.

Economic Report (Continued)

Ratings

HVB's creditworthiness and credit rating are assessed by the credit rating agencies Moody's Investors Service Inc. (Moody's), Fitch Ratings Limited (Fitch) and Standard & Poor's Credit Market Services Europe Limited (S&P). The credit rating agencies Moody's, Fitch and S&P commissioned by HVB are registered and certified as credit rating agencies in line with Regulation (EC) No. 1060/2009 of the European Parliament and of the Council of 16 September 2009 ("CRA Regulation").

Moody's

Moody's affirmed HVB's issuer rating at 'A2' and deposit rating at 'A2'/P-1' on 23 November 2023. The outlook was adjusted from 'negative' to 'stable'. This decision follows a rating move for Italy and the subsequent rating decision for the Italian parent company UniCredit S.p.A. The rating outlook reflects Moody's expectation that HVB's financial profile and liability structure will remain stable. The outlook also confirms that Moody's expects the credit profile of the parent company UniCredit S.p.A. to remain resilient despite the prevailing macroeconomic headwinds in the corporate group's core markets.

HVB's stand-alone rating (BCA) was affirmed at 'baa2'. Moody's continues to emphasise the strong capital base, the good asset quality and solid liquidity position of HVB. Moody's is still limiting the rating gap between HVB's stand-alone rating to a notch higher than that of its parent company which, from Moody's perspective, recognises the existing interdependencies due to the Bank's role as the global investment banking hub for the corporate group and Moody's assumptions regarding the resolution strategy.

As part of the rating decision, HVB's ratings for preferred senior unsecured bonds and the counterparty risk rating (CRR) were affirmed at 'A2' and 'A1'/'P-1' respectively.

Fitch Ratings

On 19 January 2024, Fitch affirmed HVB's ratings with a 'stable' outlook in the course of its ongoing annual review. The rating outlook continues to reflect HVB's solid capital base and profitability. HVB's issuer default rating (IDR) stands at 'BBB+'/'F2', the derivative counterparty rating at 'A- (dcr)' and the rating for deposits as well as for preferred senior unsecured bonds remains at 'A-'/'F2'. HVB's long-term issuer default rating (IDR) continues to be determined by the Bank's viability rating (stand-alone rating) which is 'bbb+'. In its credit rating assessment, Fitch emphasises the very good capital base, the improved profitability and the consistently robust refinancing and liquidity profile of HVB.

Standard & Poor's

S&P affirmed HVB's ratings during a routine credit review on 28 February 2024. The outlook for these ratings is 'stable'. HVB's issuer credit rating (ICR) stands at 'BBB+'/'A-2', the resolution counterparty rating is 'A-'/'A-2' and the rating for preferred senior unsecured debt instruments is 'BBB+'. The rating outlook reflects S&P's expectation that HVB's capital base will remain at a high level despite a deterioration expected in the economic environment and that HVB's financial results will continue to remain stable. In addition, the outlook shows that HVB's financial and operating interdependencies will not increase in the context of implementing UniCredit's Single Point of Entry (SPE) resolution strategy. Although S&P rarely awards a rating to subsidiaries with an SPE resolution strategy higher than that of the parent company, HVB's rating is a notch higher than the rating of UniCredit S.p.A. In its credit rating assessment, S&P emphasises that HVB's ratings continue to be supported by a strong capital base, the Bank's solid market position in corporate banking, its diversified and stable funding base and other measures.

Forecast Report / Outlook

The following comments on the outlook are to be viewed in connection with those in the Financial Review and the Risk Report in the Combined Management Report of the 2023 Annual Report.

General economic outlook

After global GDP growth of 3.2% in 2023, the global economy is likely to cool a little in 2024 before picking up slightly again in 2025. HVB Group is assuming growth of 3.1% in 2024 followed by 3.2% in 2025 (The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024). A moderate slowdown in the global economy in 2024 is indicated by higher real interest rates as a result of the tightening carried out by central banks such as the Fed and the ECB in the past, which are only likely to show their full dampening impact with a time lag. Moreover, employment growth is likely to slow down in the USA and Europe. HVB Group expects inflation rates in industrialised countries to gradually fall further. While price increases for goods will probably remain rather low, the growth in prices for services is likely to weaken on the back of less dynamic wage increases. In China, the weak economy is set to continue in view of the situation on the property market, which is likely to remain difficult, and cautious consumers. The tense geopolitical situation is increasing risks for the global economy. For example, abrupt price swings on financial and commodities markets coupled with a persistently high level of uncertainty due to geopolitical events could weigh on the global economy.

HVB Group expects that the US economy will be unable to maintain the pace of growth it saw in 2023 (2.5%) and will weaken in 2024 (up 2.2%) and 2025 (up 1.3%). Less dynamic growth in consumer spending as a result of a slower increase in employment and a further decline in surplus savings of private households will play an important role in the economic slowdown. Corporate investments are not likely to be of much support in view of high real interest, less stimuli from fiscal policy and uncertainty in the run-up to the US elections in November 2024. In its baseline scenario, HVB Group assumes that there will no major geopolitical or trade policy shocks after the US elections which might adversely affect the US economy. However, the risks are pointing towards a policy that might curb growth and increase inflation. From the third guarter of 2024, HVB Group expects interest rate cuts by the US Federal Reserve, which are likely to total 75 basis points by year-end 2024. Further interest rate cuts totalling 125 basis points are likely to follow in 2025 (The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024).

The development of the real estate market is expected to remain weak and the population will presumably decline further, most likely contributing to China's growth remaining rather bumpy and subdued by historical standards. In addition, a persistently low level of private consumer spending is expected while exports and government investments are likely to generate moderate momentum. After growth of 5.2% in 2023, HVB Group expects growth of 4.8% in 2024, followed by 4.3% in 2025 (The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024).

For the eurozone, HVB Group anticipates slight growth of 0.6% in 2024 like in the previous year followed by a moderate recovery with GDP growth of 1.2% in 2025 (The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024). The inflation rate is expected to average 2.4% in 2024 and 1.8% in 2025 after 5.4% in 2023. The ECB will probably gradually lower the key interest rates further with interest rate cuts likely to total 75 basis points by year-end 2024 (The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024).

Forecast Report / Outlook (Continued)

At country level in the eurozone, HVB Group expects slight GDP growth of 0.4% in Germany in 2024 (2025: 1.3%). By contrast, economic output in the other larger countries of the eurozone should improve somewhat in 2024. For France, HVB Group expects growth of 1.0% (2025: 1.2%) and for Italy, growth of 0.8% (2025: 1.1%, *The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024*).

A slight economic recovery in Germany in 2024 is indicated on the one hand by the fact that the reduction of high inventories in the manufacturing and retail sectors is likely to come to an end. On the other hand, relatively robust growth is likely to be seen in global trade from which the export-dependent German industry should benefit. The mix of lower inflation and higher wages will probably lead to a moderate increase in consumer spending. However, the construction industry is likely to continue to weigh on the economy, although the decline in building permits in residential construction has slowed recently. Consumer prices are expected to rise by 2.4% on average in 2024 and by 1.7% in 2025 (2023: 5.9%, *The UniCredit Economics Chartbook, Disinflation on track, rate cuts have a way to go, published on 26 June 2024*).

Banking sector development in 2024

The fundamental indicators for the European banking sector are still very good. In particular, net interest income in the European banking sector continued at a high level, while credit risk costs were maintained at a moderate level and capitalisation remained good.

The deposit rate of the European Central Bank (ECB) fell by 0.25 percentage points in June, whereas the interest rate on savings deposits from households with an agreed term had already fallen by 0.23 percentage points in the first five months of 2024. Consequently, the first interest rate cut by the ECB has not yet had a significantly negative impact on the profitability of European banks, particularly for countries with a high proportion of savings deposits with an agreed term. The return on equity of European banks stood at 10.6% in the first quarter compared with 10.4% in the first quarter of 2023 and less than 4% in the period from 2009 to 2022 (*European Banking Authority*). Due to further expected interest rate cuts by the ECB in 2024, the dynamic growth in net interest income is expected to weaken. Nevertheless, the consensus estimate for the return on equity of European banks is more than 11% in 2024 and more than 10% in 2025.

On the structural side, the profitability of European banks continues to improve, which also bolsters the profit outlook for 2024. Firstly, an acceleration in digital customer interaction was seen as a result of the COVID-19 pandemic, enabling a further structural adjustment of branch networks. Secondly, there were a number of national bank mergers primarily in Spain and Italy, which is likely to additionally boost profitability in the sector in the medium term. In Germany, the consolidation in the banking sector, which has been ongoing for years, also continued, albeit at a slower pace than in previous years. In the course of the year, the total number of banks fell by net 55 (previous year: 61) to 1,403 banks (*Deutsche Bundesbank*). It is to be assumed that the process of consolidation among European banks will continue, although still focusing on domestic consolidation instead of large cross-border mergers. Moreover, the trend towards streamlining and focusing banks' business models continues, with a concentration on core areas and markets in strong competitive positions generating correspondingly higher margins. On the costs side, most banks are continuing to adapt their office space to the new hybrid working environment, enabling a further optimisation of the cost structure.

The liquidity position of the banking sector remained very good despite TLTRO III repayments. At the end of March 2024, the average liquidity coverage ratio (LCR) stood at 161,4% and the net stable funding ratio (NSFR) at 127.2%, meaning that both liquidity ratios were well above the regulatory minimum requirements of 100%. The excess liquidity of European banks declined further by €0.4 trillion in the first half of 2024 and totalled €3.1 trillion as at 11 July 2024. In October 2022, the ECB decided to adjust the conditions for TLTRO III operations resulting in banks prematurely repaying a large amount of TLTRO III funds. Further tranches were due in March and June 2024. As at the end of June 2024, only €76 billion in TLTRO-III funds in total were still outstanding compared with the original €2.2 trillion that was drawn down. The repayment of TLTRO III funds went smoothly. The banking sector had a long time to prepare for the repayments, which also explains, among other things, the high volume of covered bonds issued since 2022. In the second half of 2024, the remaining TLTRO-III funds will finally fall due, as a result of which excess liquidity will decline further but still remain at a historically high level. As regards customer deposits, private customer deposits at banks in Europe were up by 0.9% in the first six months of 2024, whereas deposits from the corporate sector were down by 2.0%. However, there were considerable differences between individual countries. While deposits in Spain, Italy and France declined, deposits in Germany increased (European Central Bank).

The risk costs of European banks amounted to 0.56% of the outstanding loans in the first guarter of 2024, which was around the average of 0.53% over the last five years. The relative volume of non-performing loans increased slightly from 1.8% to 1.9% of the outstanding loans in the first quarter of 2024 compared with year-end 2023. The proportion of loans showing a significant increase in credit risk and classified at Level 2 according to IFRS 9 decreased to 9.4% as at 30 June 2024 compared with 9.6% at year-end 2023. The high proportion of Level 2 loans shows that the asset quality of European banks is expected to develop moderately negatively in 2024, but to a manageable extent due to the availability of risk provisions and the significant improvement in profitability in the banking sector (European Banking Authority). The banks themselves anticipate stable to slightly higher risk costs in 2024 according to information provided in recent quarterly reports. The focus is currently primarily on commercial property financing, which accounts for 6.9% of the outstanding loans in the European banking sector.

The capitalisation of banks remains at a high level. As at the end of March 2024, the average CET1 capital ratio of European banks amounted to 16.0% (on a fully loaded basis, EBA data). This more than met the regulatory minimum requirements, which are 9.8% for 2024 on average for banks supervised by the ECB. Over the course of 2024, the minimum capital requirements increased, particularly as a result of the increase in the countercyclical capital buffer in several countries. This will narrow the gap to the minimum capital requirements for banks somewhat but banks will continue to significantly exceed the capital requirements on average. The average CET1 capital ratio in the banking sector remained constant in the first guarter of 2024, despite a greater focus on dividends and share buybacks (European Banking Authority).

To summarise, the banking sector in Europe and Germany is in good shape and is well prepared for a possible slight increase in defaulting loans. The dynamic growth seen in net interest income will weaken in 2024 as further interest rate cuts by the European Central Bank will adversely affect the average net interest margin. However, profitability will continue to be supported by higher interest rates in the medium term and a return to negative interest as seen from 2014 to 2022 is currently unlikely. Despite this, banks will need to continue making further structural adjustments, such as digitalising their business processes, adjusting branch networks and consolidating further in the banking sector.

Forecast Report / Outlook (CONTINUED)

Development of HVB Group

We are continuing to follow the guidelines of our UniCredit Unlocked strategic plan embedded in the group-wide strategic plan. The following statements on future development are based on the corporate planning of HVB Group and thus on the rules governing the segmented income statement. As stated in the forecast made in the 2023 Annual Report, we continue to expect HVB Group to generate a significant improvement in profit both before and after tax in the 2024 financial year compared with 2023 despite the still challenging macroeconomic and geopolitical environment (economic uncertainties and Russia-Ukraine conflict).

In the first half of the year, operating income benefitted from a strong start to the year. For the second half of 2024, we expect a moderate decline over the first half of 2024 due to seasonal factors. For the 2024 financial year, we assume that operating income will remain virtually unchanged compared with the 2023 financial year despite a persistently uncertain economic environment in Germany.

As a result of declining interest rates, we expect a moderate decrease in net interest compared with 2023, although net interest in the second half of the year should be moderately higher than the level recorded in the first half. For net fees and commissions, we anticipate a noticeable year-on-year increase in 2024 with a moderate decline in income in the second half, again due to seasonal factors, after a strong first half of the year. For net trading income, we expect a moderate increase in the 2024 financial year. However, after a strong first half of the year, we expect to see a significant decline in this income in the second half.

Thanks to the consistent implementation of the UniCredit Unlocked strategic plan and efficient cost management, we anticipate a moderate decline in operating costs in the 2024 financial year compared with 2023 with a virtually unchanged development in the second half of the year compared with the first half. We continue to expect a moderate improvement in the cost-income ratio in 2024 compared with 2023. However, in the second half of the year, the cost-income ratio should be noticeably higher than in the first half due to the moderate decline in operating income and the virtually unchanged costs.

The forecast made in the 2023 Annual Report of a decline in net write-downs of loans and provisions for guarantees and commitments in the 2024 financial year compared with the previous year cannot yet be confirmed due to developments in the first half of 2024. After the net additions in the first half of 2024, we are expecting lower net additions to net write-downs of loans and provisions for guarantees and commitments for the second half of 2024. Net write-downs of loans and provisions for guarantees and commitments for the 2024 financial year are affected by the persistently uncertain macroeconomic situation and by the development of individual material credit exposures. Net write-downs of loans and provisions for guarantees and commitments will also be continuously reviewed in the second half of the year to take account of current developments.

As a result of the elimination of the contributions to the Single Resolution Fund, we expect a significant year-onyear decline in provisions for risks and charges.

In the second half of the year, profit before tax is likely to be moderately lower than in the first half, which is mainly due to the seasonal development of operating profit. Profit after tax in the second half of 2024 will also be moderately lower than in the first half of the year.

For the RoAC, we anticipate a significant year-on-year improvement in 2024 and thus confirm the forecast we made in the 2023 Annual Report for the full year 2024. In the second half of the year, we expect the RoAC to remain virtually unchanged compared with the first half despite the seasonal nature of the income.

UniCredit is striving to simplify the structure of its trading activities. In the first half of 2024, the trading activities of the UniCredit corporate group were still bundled at HVB. Beginning in the second half of 2024, these will be gradually transferred to UniCredit S.p.A. In the long term, HVB Group is expected to benefit from the positive impact this will have in future on profitability, capital ratios and leverage ratio and, at the same time, see a reduction in risks, profit volatilities and complexity. The transfer of a first tranche of trading activities took place in July 2024. The purchase agreement was signed at the end of December 2023.

The transfer of the first tranche of trading activities in the second half of 2024 has not resulted in any different expectation regarding a significant increase in the profit before tax of HVB Group for the 2024 financial year compared with 2023 and is included in the expectations described above concerning the second half of the year and the full year 2024.

After a seasonally strong first half of the year in the Corporates operating segment, we expect a moderate decline in profit after tax in the second half of the year. Compared with the full year 2023, we expect a virtually unchanged profit after tax for the full year 2024. A moderate year-on-year improvement will be seen in the cost-income ratio in the full year 2024. For the RoAC, we expect a noticeable improvement for the full year 2024 compared with the full vear 2023.

For the Retail operating segment, we expect a noticeable improvement in profit after tax for the second half of the year compared with the first half, which will lead to a significant improvement in profit after tax in the full year 2024 compared with the full year 2023. A noticeable improvement will be seen in the cost-income ratio in the full year 2024. The RoAC will improve significantly in the full year 2024 compared with the full year 2023.

For the Other operating segment, we expect to see a significant increase in profit after tax in the 2024 financial year compared with the 2023 financial year with a low share in the total result of HVB Group overall. For the second half of the year, we anticipate a significant decline here. The cost-income ratio will improve moderately in the full year 2024 compared with the previous year. We expect a significant improvement in the RoAC for the full year 2024 compared with the full year 2023.

For the 2024 financial year, we expect HVB Group to have a solid capital base with a CET1 capital ratio that is moderately higher than the figure in 2023.

The opportunities in terms of future business policy and corporate strategy, performance and other opportunities were described in detail in the 2023 Combined Management Report of HVB Group in the section entitled "Forecast report/Outlook". The statements made in that report continue to apply in principle.

Risk Report

HVB Group as a risk-taking entity

By their very nature, the business activities of HVB Group are subject to risk. HVB Group defines risk as the danger of suffering losses on account of internal or external factors. In the course of our business activities, risks are identified, quantified, assessed, monitored and actively managed. We therefore regard it as one of our core duties to apply these considerations in order to integrate risk-management, risk-controlling and risk-monitoring processes in all operating segments and functions of our Group. These activities are the precondition for providing adequate capital backing and maintaining an adequate liquidity base.

All HVB Group companies that are included in the consolidated financial statements of HVB Group prepared in accordance with International Financial Reporting Standards (IFRS) are incorporated in the risk management programme of HVB Group. As part of the Internal Capital Adequacy Assessment Process (ICAAP), these Group companies are classified into the categories "large", "medium", "small plus" and "small" by applying various criteria such as market position, scope of business activities and complexity of the risk profile or portfolio structure. With the exception of the Group companies classified as "small", which are subject to a simplified approach to risk measurement, the economic capital is measured differently for the individual risk types. Within the framework of the ICAAP, the Bank differentiates between the two perspectives required by the regulatory authorities to ensure capital adequacy, the normative and the economic perspective. In the economic perspective, all risks that can lead to economic losses are covered by the economic capital, which is calculated on the basis of internal processes and methods. This is the basis for the risk-taking capacity as a measure used by HVB Group for economic capital adequacy. In the normative perspective, capital adequacy is additionally ensured by means of multi-year capital planning.

Risk types

Credit risk is defined as the potential losses arising in the value of a credit exposure due to an unexpected change in credit quality of a contracting party (borrower / financial investment / small legal entity, counterparty, issuer or country). This potential loss may be brought about either by a default by the borrower who is thus no longer in a position or willing to meet its contractual obligations in full, or its rating has been downgraded as a result of a deterioration in its credit quality.

Market risk is defined as the risk of incurring losses on positions held on and off the balance sheet in the trading or investment books as a result of unfavourable changes in the market value of securities or financial derivatives. The most relevant of these market prices are interest rates (used to determine and discount cash flows), share prices, credit spreads (including, but not limited to, changes in these spreads due to credit defaults or rating changes), spot exchange rates, commodity prices and derived prices such as volatilities and correlations between these parameters. Market risk also includes the behavioural model risk, which represents the statistical uncertainty involved in the model assumptions for sight and savings deposits as well as the early repayment of mortgage loans.

Liquidity risk is defined as the risk that HVB Group will not be able to meet its payment obligations as they fall due without incurring unacceptable losses.

In line with the Capital Requirements Regulation (CRR), HVB Group defines operational risk as the risk of losses resulting from inadequate or deficient internal processes and systems, human error or external events. This definition includes legal risk but excludes strategic and reputational risk.

These risk types are described in detail in the section entitled "Risk types in detail". All other risk types of HVB Group are summarised in the section entitled "Other risks", which is presented in an abridged form.

The following risk types are summarised as other risks:

- Real estate risk covers potential losses resulting from fluctuations in the market value of the Bank's own real estate portfolio. This comprises the real estate owned by Group companies (owned or leased in accordance with IFRS 16), real estate holding companies and special purpose vehicles. No land or properties are included that are held as collateral. These are included under credit risk.
- Business risk is defined as a measure of the gap between unexpected disadvantageous changes in the Bank's future earnings and expected changes over a one-year risk horizon. Business risk can result above all from a serious deterioration in the market environment, changes in the competitive situation or customer behaviour but also from changes in the cost structure.
- Pension risk can occur on both the assets side and the liabilities side (pension commitments). This may be caused by a decline in the fair value of plan assets on the assets side due to disadvantageous changes in market prices as well as an increase in the commitments on the liabilities side, due for instance to a reduction in the discount rate. Furthermore, there are actuarial risks such as longevity risk (changes to the mortality tables) on the commitments side. In this context, pension risk is the risk that the pension provider will have to provide additional capital to service the vested pension commitments.
- Financial investment risk covers potential losses arising from fluctuations in the measurement of HVB Group's equity interests. HVB Group's financial investment risk stems from the occurrence of losses in equity provided in connection with a financial investment in other companies that are not consolidated in HVB or included in market risk. Financial investment risk is accounted for in the risk analysis via credit risk and market risk.
- Strategic risk results from management either not recognising early enough or not correctly assessing significant developments or trends in the Bank's environment. As a result, fundamental management decisions could, in retrospect, prove to be disadvantageous in terms of the achievement of the Bank's long-term goals. In addition, some decisions may be difficult to reverse or not be able to be reversed directly. In the worst case, this can negatively impact the profitability and risk profile of HVB Group.
- Reputational risk is defined as the risk of negative effects on the income statement caused by adverse reactions by stakeholders due to a changed perception of the Bank. This changed perception may be triggered by a primary risk such as credit risk, market risk, operational risk, liquidity risk, business risk, strategic risk or independently of any triggering primary risk.
- Model risk defines the risk of model weaknesses due to data errors, incorrect assumptions or incorrect methodology within the scope of the ICAAP calculations. It thus refers to the possibility of the economic capital being estimated incorrectly. For this reason, a model risk charge is added to the aggregated economic capital for the established risk types.
- Sustainability risk defines risks with any financial impact arising from the current or future influence of sustainability factors on its counterparties (e.g. borrowers, customers or issuers) or invested assets (especially risks arising from the core activities of HVB Group). Sustainability factors are environmental, social or corporate governance issues that could have a negative impact on the balance sheet, earnings or liquidity position of HVB Group. Sustainability risk is not currently a standalone risk type but is being successively integrated into relevant risk types.

Risk Report (Continued)

Integrated overall bank management

Risk management

HVB Group's risk management programme is built around the business strategy adopted by HVB's Executive Board, the Bank's risk appetite and the corresponding risk strategy.

The risk-taking capacity upon achievement of the set targets is assessed on the basis of the risk strategy and the business and risk plans, using the available risk coverage potential. At the same time, limits are defined in the planning process to ensure that the risk-taking capacity is maintained.

Pursuant to the Minimum Requirements for Risk Management (Mindestanforderungen an das Risikomanagement - MaRisk), multi-year budgeting is performed in relation to the economic capital. This involves analysing the relevant risk types over a time horizon of at least three years and taking into account a deteriorating macroeconomic environment. Two scenarios with negative consequences are examined independently of each other to permit an assessment of the effect of a deteriorating macroeconomic business environment. In the planning process for 2024, these planning scenarios, referred to as adverse scenarios, have been derived against the backdrop of macroeconomic developments (scenario 1) and additional non-macroeconomically motivated drivers (scenario 2). Compared to the base scenario, the first scenario assumes a negative trend in German gross domestic product in 2024 and a slower recovery in 2025. Higher inflation in Germany is also anticipated in 2024 and lower market interest rates in the eurozone over the entire planning period. The second scenario takes account of further effects, such as a reduction in the new business margin in the lending business and a general deterioration in HVB's credit portfolio, in addition to the factors underlying scenario 1. Since the risk coverage potential is considered with the same scenarios, it is possible to make a statement about how the risk-taking capacity will evolve overall over three years, taking into account the macroeconomic scenarios.

Implementation of the risk strategy is a task for the Bank as a whole and is essentially carried out by the Chief Risk Officer (CRO) organisation. The CRO organisation is responsible for risk management and risk policy guidelines set by the Executive Board. The CRO reports on a regular basis to the Executive Board and the Risk Committee of the Supervisory Board on the Group's risk situation.

New releases and updates to instructions, policies and the risk strategy are communicated through the Bank's internal information system.

Separation of functions

In addition to Bank-wide risk management, integrated overall bank management is accompanied by comprehensive risk controlling and risk monitoring that are functionally and organisationally independent in accordance with the MaRisk rules.

Risk controlling

Risk controlling is defined as the operational implementation of the risk strategy. Credit Risk Operations (CRP) is responsible for the operational management of credit risk for the operating segments. The credit specialists take lending decisions in the defined "risk-relevant business". They thus make it possible for the operating segments to take on risk positions in a deliberate and controlled manner within the framework of the risk strategy and to evaluate whether it is profitable to do so from the overall perspective of the customer relationship and on the basis of risk-return considerations. In the "non-risk-relevant business", the operating segments are authorised to take their own lending decisions under conditions set by the CRO organisation. The Financial Risk (CMR) unit is responsible for monitoring the implementation of the market risk strategy and the ALM & Funding unit within the Finance organisation for controlling liquidity risk. The Non-Financial Risks unit is responsible for controlling operational risk and reputational risk with the support of the relevant operational risk managers.

Controlling the business risk consists mainly of the planning of earnings and costs by the individual operating segments, which the Finance organisation proactively coordinates. The relevant operating segments are responsible for controlling the financial investments. The real estate risk arising from the property portfolio within the Group is controlled centrally by the Digital & Operations division. Within HVB Group, this is performed by the Real Estate unit (DOP8). HVB Group has undertaken to provide a range of different pension plans, which are largely financed by various investment vehicles, some of which are external. Under the capital investment process, there are separate rules covering the specific risk controlling of the different pension plans in each case. Some of these are subject to supervision by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin), specifically by the Insurance and Pension Funds Supervision unit, and therefore need to comply with external rules and regulations. Controlling of strategic risk is the shared responsibility of HVB's Executive Board.

Risk monitoring

The central risk monitoring function within the CRO organisation is responsible for identifying, measuring and evaluating the risks at HVB Group. It is structured according to risk types. The risk monitoring functions for the following risk types: market risk and liquidity risk (for the liquidity risk, however, exclusively the risk monitoring functions of stress tests, calculation and monitoring of early warning indicators, calculation of the short-term concentration risk, evaluation of the funding plan) are bundled in the Financial Risk unit, while operational risk and reputational risk are bundled in the Non-Financial Risks unit. In addition, the Financial Risk unit also monitors the market risk component of pension risk at regular intervals using a separately developed model (aggregated view of the plan assets and liabilities) as well as the behavioural model risk. As part of the asset management of the plan assets, the options for risk positioning are limited by both external and internal regulations. Ongoing monitoring of the respective rules is performed in accordance with the specific policies of the various pension plans. With regard to the monitoring of liquidity risk, some tasks are performed by the Financial Risk unit while further risk monitoring functions for this risk type are the responsibility of the ALM & Funding unit within the Finance organisation (continuous monitoring of the liquidity risk situation and compliance with limits). The Strategic Credit & Integrated Risks unit monitors credit risk, business and real estate risk as well as the aggregate economic capital and the economic capital requirement. Financial investment risk is depicted via market risk and credit risk. The monitoring of strategic risk is the shared responsibility of HVB's Executive Board. Sustainability risk materialises via the traditional risk types (credit risk, market risk, operational and reputational risk, liquidity and funding risk) and is gradually being integrated into risk monitoring in the course of a project.

Risk Report (CONTINUED)

The following are quantifiable risk types: credit risk, market risk (including behavioural model risk), operational risk, business risk, financial investment risk (covered under credit risk and market risk), real estate risk, pension risk, reputational risk, and the model risk quantified as risk charge on the established risk types. The available risk coverage potential is defined, quantified and compared with the risk capital in order to analyse the risk-taking capacity.

Liquidity risk is also a quantifiable risk but is not included in the calculation of the risk-taking capacity.

A qualitative approach is used to monitor strategic risk.

Implementation of overall bank management

Strategy

The business strategy and the risk strategy define the cornerstones of business and risk policy for HVB Group. The subsidiaries, outsourcing, sustainability (ESG), and information and communication technology (ICT) are incorporated in both the risk strategy and the business strategy. The HVB Group business strategy describes the strategic starting point and the organisational structure, the strategic cornerstones at overall bank level and the sub-strategies of the individual operating segments.

The HVB Group risk strategy is derived consistently from the business strategy, supplementing it with the relevant aspects of risk management. The HVB Group risk strategy controls the risk types, credit risk and market risk (including financial investment risk components for each), operational risk, pension risk, reputation risk, real estate risk and business risk using the economic capital, supplemented by an explanation of the model risk. This control is supplemented by risk-type-specific limits in credit risk and market risk. Liquidity risk is managed quantitatively in terms of cash flow analyses and integrated into the planning process via the funding plan. A qualitative description is provided of the strategic objectives for strategic risk, sustainability risk and for outsourcing. The risk strategy is supplemented by the Industry Credit Risk Strategy, which specifies the risk appetite within the individual industries.

The strategies approved by the Executive Board of HVB are reviewed on both an ad hoc and an annual basis and modified when necessary.

Overall bank management

The metrics defined for the overall bank management of HVB Group are reviewed in the annual budgeting process and used to assess the success of the business strategy and the risk strategy. Earnings targets, risk targets, liquidity targets and capital targets are defined in the budgeting process together with the targeted risk-taking capacity at overall bank level. The limits for economic capital are defined and monitored in order to guarantee the risk-taking capacity. For the purposes of operating segment management, the economic capital limits are distributed for the credit, market and real estate risk to ensure that the planned economic risks remain within the parameters defined by the Executive Board of HVB.

Key performance indicators (KPIs) generally applicable across the operating segments have been defined for the management of HVB Group. These KPIs serve to entrench the aspects of profitability and growth, as well as constraints and sustainability.

The value-oriented management of HVB Group focuses on the measurement of the business activities in accordance with return and risk considerations, with a risk-return target set for each of the business units of HVB Group. The expected economic returns are calculated using the allocated capital principle that is applied groupwide by UniCredit. Within the scope of the principle of dual control, both regulatory capital, in the sense of used core capital (Common Equity Tier 1), and economic capital are allocated to the operating segments. Both resources are expected to yield an adequate return, the amount of which is derived from the returns expected by the capital market.

In line with the parameters defined in the business and risk strategies, the defined targets are broken down to operating segment level and then translated into operational metrics for sales management. The defined targets are monitored using a standardised report to the Executive Board of HVB. After corresponding analysis, the Executive Board of HVB initiates countermeasures in response to significant deviations from the targets defined in the budgeting process.

Regulatory capital adequacy **Used core capital (Common Equity Tier 1)**

For the purposes of planning and monitoring risk-weighted assets, the operating segments are required to have core capital backing of equivalent risk-weighted assets arising from credit, market and operational risks equal to an average of 13.0%. The expected return on investment is derived from the average used core capital (Common Equity Tier 1).

Management of regulatory capital adequacy requirements

Essentially, the following three processes have been defined from the normative capital perspective to safeguard an adequate capital base over the long term:

Yearly budgeting of the regulatory capital taking account of regulatory requirements, while applying the three capital ratios listed below, which are managed within HVB Group's risk appetite framework using internal target, trigger and limit levels:

- Common Equity Tier 1 capital ratio: ratio of Common Equity Tier 1 capital to the sum of risk-weighted assets arising from credit risk positions and the equivalent risk-weighted assets from market and operational risk positions
- Tier 1 capital ratio: ratio of Tier 1 capital to the sum of risk-weighted assets arising from credit risk positions and the equivalent risk-weighted assets from market and operational risk positions
- total capital ratio: ratio of equity funds to the sum of risk-weighted assets arising from credit risk positions and the equivalent risk-weighted assets from market and operational risk positions

Quarterly performance of stress tests of the regulatory capital ratios under various scenarios (details on the stress tests can be found in the section entitled "Stress tests").

Monthly performance of a rolling eight-quarter projection to provide an ongoing forecast of the capital ratios of HVB Group. This projection is supplemented on a quarterly basis by a 3-year simulation of the capital ratios based on three different scenarios to completely map the normative capital perspective.

Risk Report (CONTINUED)

More details on the development of these capital ratios are presented in the sections entitled "Risk-weighted assets, key capital ratios, and leverage ratio of HVB Group" and "Operating performance of HVB Group" in the section entitled "Financial Review" of this Interim Management Report.

The total capital ratio of HVB Group is 27.8% as at 30 June 2024 (31 December 2023: 27.1%).

Economic capital adequacy

The economic capital is the sum of the aggregated economic capital for all quantified risk types (with the exception of liquidity risk) and the specific model risk premium. The economic capital measures the potential for unexpected loss over a time horizon of one year with a confidence level of 99.90%.

When the aggregated economic capital is determined, risk-mitigating diversification effects are taken into account between the individual risk types. HVB Group deploys UniCredit's group-wide model for risk aggregation that uses parameters that are uniform throughout the Group for determining interdependencies between the risk types. In terms of methodology, the model is based on a copula approach where the parameters are estimated using the statistical Bayesian method.

An all-round overview of the risk situation of HVB Group is obtained by assessing the risk-taking capacity on a quarterly basis, as shown in the table "Economic capital after portfolio effects".

Economic capital after portfolio effects (confidence level 99.90%)

	30/6/2024		31/12/2023	
Broken down by risk type	€ millions	in %	€ millions	in %
Credit risk	2,968	45.2	2,860	37.7
Market risk ¹	1,966	30.0	2,770	36.6
Pension risk	661	10.1	976	12.9
Operational risk	409	6.2	413	5.4
Real-estate risk	138	2.1	138	1.8
Business risk	190	2.9	188	2.5
Reputational risk	87	1.3	72	1.0
Aggregated economic capital	6,419	97.8	7,417	97.9
Model risk charge	142	2.2	160	2.1
Economic capital of HVB Group	6,562	100.0	7,577	100.0
Included diversification effects	(955)		(1,046)	
Risk coverage potential of HVB Group	16,991		17,674	
Risk taking capacity of HVB Group, in %		258.9		233.3

¹ Including behavioural model risk Contains rounding differences.

Economic capital fell by €1,015 million in comparison to 31 December 2023. The decline is mainly due to reductions in market and pension risk based on methodological changes. The main changes are described under the respective risk type.

Economic capital (without pension risk and without the model risk charge) broken down by operating segment (confidence level 99.90%)

	30/6/2024		31/12/2023	
Broken down by operating segment	€ millions	in %	€ millions	in %
Retail	528	9.2	547	8.5
Corporates	3,385	58.8	3,403	52.8
Other	1,845	32.0	2,491	38.7
Economic capital (without pension risk and without the model risk charge) of HVB Group	5,758	100.0	6,441	100.0

The decline in the Other segment (central functions) is mainly driven by market risk and based on methodological changes.

Risk appetite

The risk appetite is defined as part of the annual strategy and planning process for HVB Group, whereby selected metrics are monitored only for HVB. The risk appetite metrics comprise specifications that are broken down into regulatory metrics and managerial metrics and subdivided into categories such as capital, financial and nonfinancial risk, credit risk or risk and earnings. For the most part, targets, triggers and limits are defined for these metrics that allow excessive risk to be identified and countermeasures to be initiated at an early stage. The matter is escalated to the appropriate persons with authority, committees and the Executive Board of HVB, should the defined limits be exceeded or not reached.

Consistent going concern approach

Since 2019, HVB Group has managed its risk-taking capacity from an economic perspective as part of an approach to the ongoing protection against risks and the continuation of business activities from a capital perspective (continuity of operations). At the same time, targets, triggers and limits are defined for regulatory capital backing as well as for risk-taking capacity.

Recovery plan

The preparation of recovery plans (RPs) is intended to facilitate the restructuring of systemically important financial institutions. Until the end of 2023, UniCredit S.p.A. was identified as systemically important at a global level and HVB at national level. Supervision of HVB passed to the ECB when the Single Supervisory Mechanism (SSM) came into effect in November 2014. According to a decision of the Joint Supervisory Team (JST), HVB, as part of UniCredit, has not been required to prepare an HVB Group recovery plan since 2015. For this reason, HVB works in close collaboration with UniCredit S.p.A. each year to prepare a joint "UniCredit Group Recovery Plan". This Recovery Plan was officially submitted to the ECB on 29 September 2023 and has been in effect since then.

Risk-taking capacity

As part of an analysis of the risk-taking capacity, HVB Group measures its economic capital against the available risk coverage potential (available financial resources). Furthermore, the risk-taking capacity is analysed across a defined multi-year period as part of the planning process.

Risk Report (CONTINUED)

HVB Group uses an internal definition for the risk coverage potential that, like risk measurement, has been based on a going concern approach since 2019. Under this approach, available financial resources are sufficient to continuously hedge against risks so as to ensure business operations are maintained. The risk-taking capacity is defined by comparing unexpected losses at the confidence level (economic capital) with the ability to absorb losses using the available financial resources (risk coverage potential). When determining the risk coverage potential, regulatory core capital is taken as the starting point. To maintain consistency with internal risk quantification, certain capital deductions (particularly expected losses and securitisation positions) within the definition of equity are brought into line with the internal economic perspective and some future profits are taken into account. In order to reflect the fair value concept underlying the economic approach, relevant hidden charges and deferred tax assets that cannot be considered to cover losses are also determined and deducted. The risk coverage potential at HVB Group totalled €16,991 million as at 30 June 2024 (31 December 2023: €17.674 million).

With economic capital (including the model risk charge) of €6,562 million, the risk-taking capacity of HVB Group is 258.9% (31 December 2023: 233.3%). This figure is higher than the target of 150% HVB Group set itself in the 2024 risk appetite framework. The increase of 25.7 percentage points in comparison with 31 December 2023 for HVB Group is attributable to the reduction in economic capital. The economic capital declined by €1,015 million, or 13.4%. in the first half of 2024. The risk coverage potential is €683 million. or 3.9%. lower in the first half of 2024 due to the amendment of the definition (the cap for recognisable future profits was reduced further).

Limit concept

The risk limit system is a key component of the ICAAP at HVB Group. Its purpose is to guarantee the Bank's risk-taking capacity at each reporting date by means of an integrated controlling process. A wide-ranging, consistent limit system that includes the specification of limits for economic capital, risk-type-specific limits and limits for risk concentrations has been implemented to ensure this. This covers all the risks that need to be backed with capital, which are currently the credit, market (including pension risk and behavioural model risk), operational, business, real estate and reputational risk. In addition, any model risks are included in the economic capital by means of a charge.

This system of limits reflects the business and risk strategies, taking into account the risk appetite and the risk coverage potential, at the level of HVB Group, and ensures compliance with the risk-taking capacity. The risk limits are approved by HVB's Executive Board each year during the strategy process.

The economic capital limits are allocated at the level of HVB Group as a whole as well as for the individual risk types. Based on the aggregate limit set for economic capital, the risk-taking capacity of HVB Group is guaranteed at each reporting date.

In order to identify at an early stage any potential overshooting, HVB Group has specified triggers in the form of early warning indicators in addition to the defined limits. The utilisation of, and hence compliance with, the limits is presented in the Bank's reports. Any overshooting of limits is immediately escalated and the return to compliance with limits is monitored.

Stress tests

The MaRisk rules call for stress tests to be carried out regularly using various scenarios.

Various macroeconomic downturn scenarios and a historical scenario were calculated for the cross-risk-type stress tests in 2023:

- Recession scenario (from June 2022) recession in Europe driven by rising energy prices
- Global trading and energy shock scenario (from December 2023) deep recession in Europe due to high inflation
- China slowdown scenario (from September 2023) weakening of the Chinese economy with global contagion effects
- Historical scenario (from December 2020) historical scenario based on the 2009 financial crisis
- Financial intermediary scenario a tougher version of the historical scenario (additionally maps the default of the financial intermediary with the highest stressed counterparty risk exposures)

The stress tests across risk types are presented and analysed on a quarterly basis in the Financial and Credit Risk Committee and any measures required are presented to HVB's Executive Board. Both the risk-taking capacity and the minimum requirements for regulatory capital ratios of HVB Group were met and complied with after the occurrence of the stress test scenarios listed. The risk-taking capacity within the scope of the stress test was established with a confidence level of 99.90%.

Furthermore, inverse and ad hoc stress tests are carried out.

Inverse stress tests involve analysing what events could endanger the continued existence of the Bank as a going concern. The continued existence as a going concern is considered at risk when the original business model proves to be no longer feasible or viable. The hypothetical events analysed included fraud by a trader, rating downgrades, a bank run and default by customers and industries.

Ad hoc stress tests are carried out in response to internal and external events that might have a considerable impact on HVB Group.

Concentrations of risk and earnings

Concentrations are accumulations of risk positions that react in a similar way to specific developments or events. Concentrations may have an impact within a risk type or equally across risk types. They indicate increased potential losses resulting from an imbalance of risk positions held with customers and in products or specific industries and countries.

Concentrations are analysed, monitored, managed and reported at least once a year with regard to the relevant risk drivers for credit, market, liquidity and operational risk. In particular, appropriate instruments and processes ensure the prompt identification of concentrations. Monitoring, the suitability of which is reviewed each year, is used as the steering approach for the risk types financial investment risk, real estate risk and pension risk.

Risk Report (CONTINUED)

Risk management processes for concentrations have been set up with a view to interlinking risk drivers across risk types, such that concentration risk is integrated into assessment and controlling functions.

The concentration of earnings with individual customers or in operating segments, products, industries or regions represents a business-related strategy risk for the Bank. Risks arising from concentrations of earnings are monitored each year, as avoiding these is an important indicator of sustainable diversification and hence the viability of the business model in crisis situations.

Risk inventory

The scheduled comprehensive yearly risk inventory at HVB Group was started in the first quarter of 2024. Existing and potential new risks are analysed and critically evaluated by means of structured interviews with numerous decision-makers within HVB Group and by means of questionnaires, among other things. This interview also covers aspects concerning the Russia-Ukraine conflict as well as sustainability topics. The outcome of the 2024 risk inventory will be presented to HVB's Financial and Credit Risk Committee in October 2024 and included in the calculation and planning of the risk-taking capacity. The risk inventory serves to review the overall risk profile of HVB Group. Various topics are identified, some of which are included in the stress test and in the validation of the measurement methods used for the material risk types and other ICAAP components.

Internal reporting system

The internal reporting system supports risk monitoring at portfolio level in particular. Within the framework of the internal reporting system, information is provided on the overall risk to HVB's Executive Board and the Risk Committee of the Supervisory Board on a monthly basis, to the full Supervisory Board at least on a quarterly basis and also on an ad hoc basis. In addition, further monthly risk reports focusing on specific countries and industries are created.

Risk types in detail

We provided extensive details on the management (strategy, limitation, risk mitigation, measurement), monitoring and control of the individual types of risk in in the 2023 Annual Report of HVB Group. Where the measurement methods for individual risk types have meanwhile been refined, details are presented under the risk type concerned.

1 Credit risk

Measurement

Impairment: Overlays

Although the models used to determine impairments are generally able to depict a tense economic market environment, these were expanded to include what are known as overlays in order to adequately capture the effects of the numerous current industry-specific crises.

Geopolitical overlay

Geopolitical overlays were applied in 2022 to take account of risks resulting from the Russia-Ukraine conflict that led to an increase in energy costs, inflation and interest rates for both companies and private individuals.

The geopolitical overlay is still required to ensure a fair extent of impairments at Level 1 and 2 for the specific segments at risk. This cannot be captured by the Group's macro dependency model ("satellite model") because industry-specific estimates cannot be derived from this. Instead, an additional inflow into the non-performing portfolio is expected based on the default rates of the specific segments. On this basis, higher impairments are already applied in the performing portfolio.

The geopolitical overlay is based on the following components:

- Companies from energy-intensive sectors as these are more susceptible to the consequences of the Russia-Ukraine crisis, in particular in terms of energy supply and the related increase in prices
- Individual customers.
 - with a variable interest mortgage loan (without overdue instalments) as these are seen as being particularly susceptible to rising interest and inflation rates, or
 - that are overdue with one instalment payment on at least one loan, as these customers are seen as being particularly vulnerable in the light of the current situation.

Commercial real estate business overlay (CRE)

In order to allow for the risks of the persistently high level of interest rates for the commercial real estate and construction industry, a corresponding overlay was applied in 2023. The CRE overlay was introduced, as with the geopolitical overlay, as this is a specific industry risk that cannot be derived from the Group's macro dependency model ("satellite model"). The CRE overlay covers the entire building construction and real estate sector in addition to CRE companies. However, there is no overlapping of the geopolitical and CRE overlay. The methodological approach for the CRE overlay functions in the same way as the geopolitical overlay.

Cross-border overlay

Impairments for companies directly affected by the Russia-Ukraine conflict were fully reversed in 2023.

Risk Report (CONTINUED)

Quantification and specification

The economic capital for credit risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk charge, amounts to €3,141 million, which is €86 million higher than the reported figure as at 31 December 2023 (€3,055 million).

Credit default risk

The following tables and charts for credit default risk show the aggregate exposure values (total of non-performing and performing exposure) of HVB Group including issuer risk from the trading book. Issuer risk from the trading book is also included in the regulatory market risk analysis by way of the incremental risk charge. Comments in this regard can be found in the section covering market risk.

The aggregate exposure to credit default risk is referred to as credit default risk exposure, or simply exposure, in the following. Account balances on the entry date are included in the calculation of exposure.

The remaining exposures assigned to the former Real Estate Restructuring business area are excluded from the analysis because the portfolio does not include any further new business and is earmarked for elimination. The portfolio has been reduced consistently in recent years and now stands at €16 million (31 December 2023: €16 million).

Development of metrics by operating segment

	EXPECTED LOSS¹ € millions		RISK DENSITY ² in bps	
Broken down by operating segment	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Retail	98	103	23	24
Corporates	259	234	16	15
Other	2	3	0	1
HVB Group	359	340	14	13

- 1 Expected loss of the performing exposure without issuer risk in the trading book.
- 2 Risk density as a ratio of expected loss to performing exposure without issuer risk in the trading book in basis points (bps); 100bps = 1%.

Compared with the end of 2023, the expected loss of HVB Group rose by €19 million in the first half of 2024 and the risk density increased by 1bp.

The key contributor to this development was the Corporates operating segment. Owing to rating downgrades, in particular in the agriculture and forestry sector, there was an increase here of €25 million in expected loss and 1bp in risk density.

This was offset by a lower expected loss and a lower risk density in the Retail and Other operating segments.

Breakdown of credit default risk exposure by operating segment and risk category

Broken down by operating		CREDIT DEFAULT RISK EXPOSURE		HICH ARTY RISK	OF WHICH RISK IN B BOO	ANKING	OF WHICH IS IN TRADIN	
segment (€ millions)	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Retail	42,369	42,723	222	70	_	_	_	_
Corporates	165,378	162,637	22,083	17,459	17,030	18,235	1,455	1,568
Other	51,827	54,363	1,190	106	41,156	32,351	_	_
HVB Group	259,574	259,723	23,495	17,635	58,186	50,586	1,455	1,568

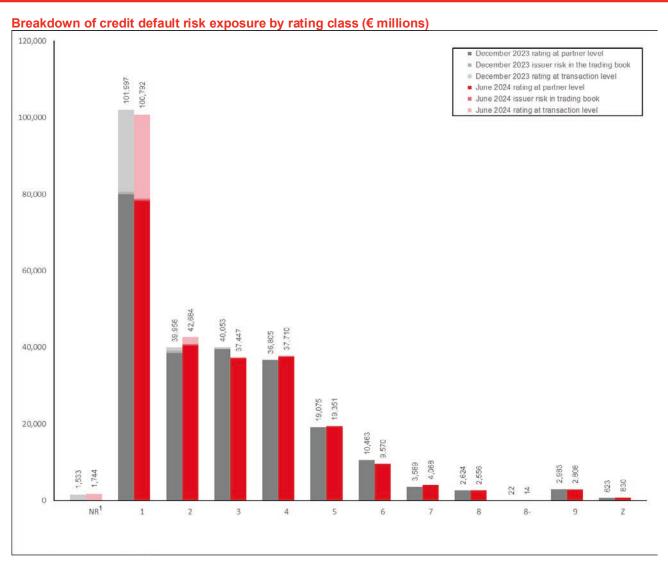
HVB Group's credit default risk exposure declined by €149 million in the first half of 2024.

The decrease in exposure of €2,536 million in the Other operating segment due in particular to reduced deposits at Deutsche Bundesbank was balanced out in part by an increase in exposure in the other financial institutions sector and the public sector.

In contrast, exposure in the Corporates operating segment increased by €2,741 million, mainly in the following sectors: financial institutions, transport, travel, telecommunications and IT.

In the Retail operating segment, exposure fell by €354 million.

Risk Report (Continued)



1 Not rated.

The rating structure of HVB Group remained largely stable in the course of the first half of 2024. A slight shift from rating classes 1, 3 and 6 towards rating classes 2, 4 and 7 could be observed, which was due to rating migrations in addition to the business development of various customers.

Development of metrics by industry group

	CREDIT DEF EXPOS € milli	SURE	OF WHICH ISS TRADING € mill	ВООК	EXPECTE € milli		RISK DE in b	
Broken down by industry group	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Financial institutions (incl. foreign sovereigns)	53,264	59,126	921	1.008	15	16	3	3
Real estate	33,304	33,499	11	12	47	49	14	15
Special products	24,973	24,488	0	1	18	14	7	6
Public sector (incl. German sovereign, excl. public service companies)	21,721	17,597	120	47	_	_	_	_
Energy	12,295	12,204	54	55	14	13	12	11
Machinery, metals	11,571	11,515	21	42	29	27	25	24
Automotive	10,646	10,100	46	77	11	11	11	11
Chemicals, pharma, healthcare	10,138	10,693	32	51	37	40	37	39
Consumer goods	8,708	8,794	6	15	20	21	24	24
Services	7,102	6,707	50	49	23	29	34	45
Telecommunication, IT	7,062	6,481	30	63	18	12	27	19
Construction, building materials	6,884	6,666	18	9	15	15	23	23
Food, beverages	5,886	5,938	12	6	10	10	17	18
Transport, travel	5,812	5,107	16	50	9	7	15	14
Agriculture, forestry	3,580	3,391	1	1	29	8	83	24
Electronics	3,506	3,480	17	15	10	6	29	19
Media, paper	2,244	2,261	4	8	6	5	27	23
Tourism	1,721	2,253	2	1	3	4	19	21
Textiles	1,501	1,574	11	4	3	5	25	38
Public service companies	1,342	1,017	81	49	1	1	9	5
Shipping	851	1,047	_	_	1	2	9	15
Private customers	25,439	25,765	_	_	40	45	16	18
Other	24	20	2	5			59	63
HVB Group	259,574	259,723	1.455	1.568	359	340	14	13

¹ Expected loss of the performing exposure without issuer risk in the trading book.

How the top five industry groups developed by exposure within HVB Group is described below.

Financial institutions (including foreign sovereigns)

The exposure in the financial institutions (including foreign sovereigns) industry group fell by €5,862 million as at 30 June 2024 compared with year-end 2023, primarily due to reduced deposits at Deutsche Bundesbank. The portfolio's expected loss decreased by €1 million and the risk density remained unchanged.

Part of the exposure in the financial institutions (including foreign sovereigns) industry group resulted from credit risk exposure to UniCredit S.p.A. and other entities affiliated to UniCredit (upstream and downstream exposure) on account of the strategic positioning of HVB as the group-wide centre of competence for the client risk management and investment banking of UniCredit and other business activities (such as export finance and guarantees).

² Risk density as a ratio of expected loss to performing exposure without issuer risk in the trading book in basis points (bps); 100bps = 1%

Real estate

In the real estate industry group, exposure as at 30 June 2024 was at an almost unchanged level (€33,304 million) compared to year-end 2023, with both the expected loss decreasing by €2 million and the risk density falling by 1bp. This was mainly due to a persistently weaker real estate market with fewer transactions in commercial real estate. The financing business remains focused on Germany.

Special products

Special products transactions include ABS/CDO bond investments, customer-related securitisations, securitisations of UniCredit's own assets, structured credit products such as structured working capital finance, margin loan finance and other structured financial transactions (not including project and acquisition finance).

In the special products industry group, exposure increased by €485 million in the first half of 2024. In this context, the focus remained on customer-related securitisations and ABS/CLO bond investments, as well as margin loan financing, which is also in line with the 2024 risk strategy. The latter determined a strategy of growth within clearly defined parameters involving conservative credit standards (for instance in relation to asset classes and rating quality) for sub-segments of the special products portfolio. Although this growth led to an increase in the expected loss and the risk density, these key ratios, at €18 million and 7bps respectively, continue to remain at a very low level compared with other industry groups.

Public sector (including German sovereign, excluding public service companies)

The public sector (including German sovereign, excluding public service companies) industry group essentially contains public authorities and the customer group comprising legal entities under public law in general. As the German states and the development banks enjoying the formers' full liability represent important counterparties for internal liquidity management, the vast majority of the exposure is due to HVB's own liquidity reserves.

In the public sector industry group (including German sovereign, excluding public service companies), exposure increased by €4,124 million in the first half of 2024. This increase is primarily attributable to the Bank's investments in liquid assets.

Energy

Exposure in the energy industry group increased by €91 million in the first half of 2024. The increase was influenced mainly by the continuing major volatility of energy and raw material prices. As our focus for new energy business is on large international companies with strong credit ratings, as defined in the risk strategy and in line with our internal sustainability standards, the portfolio quality remained almost constant overall with an expected loss of €14 million (previous year: €13 million) and a risk density of 12bps (previous year: 11bps). Project financing in the renewable energy area is within the scope of the 2024 risk strategy and the financing standards.

Exposure development of countries/regions

The following tables provide a comprehensive view of the concentration risk at country level. The exposure figures are shown with regard to the risk country of the customer.

Development of credit default risk exposure of eurozone countries

	CREDIT DEFA		OF WHICH ISSUER RISK IN TRADING BOOK		
Broken down by eurozone countries (€ millions)	30/6/2024	31/12/2023	30/06/2024	31/12/2023	
Germany	165,592	173,934	229	166	
France	13,827	12,626	216	265	
Italy	9,973	8,851	390	329	
Spain	7,770	7,662	35	23	
Ireland	6,809	6,816	_	1	
Netherlands	5,103	4,183	26	48	
Luxembourg	4,007	4,030	28	13	
Austria	3,044	2,787	48	88	
Finland	986	681	29	_	
Belgium	952	800	4	8	
Portugal	123	80	2	5	
Slovakia	119	90	3	26	
Estonia	24	22	1	_	
Greece	16	17	_	_	
Slovenia	12	26	3	_	
Cyprus	9	12	_	_	
Croatia	9	9	2	3	
Lithuania	5	1	5	1	
Latvia	5	_	5	_	
Malta	_	_	_	_	
Supranational organisations and multilateral banks	6,442	4,259	84	81	
HVB Group	224,827	226,886	1,110	1,057	

Italy

The size of the portfolio results from HVB Group's role as group-wide centre of competence for the client risk management and investment banking of UniCredit. The exposure to Italy also includes the exposure with UniCredit S.p.A.

$Risk\ Report\ ({\tt Continued})$

Development of credit default risk exposure by country/region outside the eurozone

Broken down by country/region outside the eurozone	CREDIT DEFAU EXPOSURI		OF WHICH ISSUER RIS BOOK	K IN TRADING
(€ millions)	30/06/2024	31/12/2023	30/06/2024	31/12/2023
USA	10,840	11,456	60	238
Switzerland	7,560	5,755	25	34
United Kingdom	6,519	5,669	24	28
Western Europe (without Switzerland, UK)	1,768	1,641	3	27
Asia/Oceania (without Japan, China, Hong Kong)	1,680	1,821	1	_
Eastern Europe (without euro countries)	1,291	1,279	226	162
Africa	979	991	_	_
Near/Middle East	782	859	_	_
Japan	743	725	_	_
CIS/Central Asia (without Turkey)	732	764	2	5
including Russia	549	566	2	5
including Ukraine	1	3	_	_
including Belarus	_	_	_	_
North America (without USA)	608	539	3	4
Turkey	602	655	_	_
China (including Hong Kong)	384	433	_	_
Central/South America	258	250	2	14
Without country classification	_	_	_	_
HVB Group	34,746	32,837	346	512

In the first half of 2024, the total exposure to customers in countries/regions outside the eurozone increased by €1,909 million. The exposure to customers in Russia decreased by a further €17 million in the first half of 2024.

Overlays

The following table shows an overview of the change in the main overlays:

Development of the overlays

Distribution by overlay (€ millions)	30/6/2024	31/12/2023	CHANGE
Geopolitical	61	64	(3)
Commercial real estate (CRE)	101	124	(23)
HVB Group	162	188	(26)

Geopolitical overlay

Although some of the effects of the Russia-Ukraine conflict have weakened slightly compared to the previous year. such as the availability of energy, the current macroeconomic context and the situation on the energy markets continue to be characterised by a high level of insecurity. Moreover, inflation remains high and domestic price pressure remains strong. A rapid and noticeable reduction in interest rates by the ECB is also not in sight. In this environment the downside risks remain high, and the Bank is therefore applying the geopolitical overlay of €61 million to sub-segments in a complementary manner for the reporting period. The change totalling €3 million in the reporting period arises from the sum of individual effects of the overlays applied in the ongoing review process. These include (1) a change to specific loan loss provisions, (2) the change in the macroeconomic scenario (which compensates for part of the overlay), and (3) the general development of the relevant portfolio.

Commercial real estate (CRE) overlay

Although falling real estate prices have stabilised in some areas, the persistently high interest rate level is having a continuing impact on the commercial real estate and construction sectors, which are struggling with lower orders, high construction costs due to inflation, falling real estate prices in some cases, and increased refinancing risks. In some areas there is also a gap due to continued low rental income, as long-term leases cannot be adjusted to the increased costs at short notice. The additional value adjustments booked in this way amounted to €124 million at the end of 2023 and fell by €23 million in the reporting period. Similar to the geopolitical overlay, this change results from the sum of individual effects: (1) the change to specific loan loss provisions, (2) the change in the macroeconomic scenario and (3) the general development of the relevant portfolio.

Financial derivatives

Alongside the goal of generating returns, derivatives are employed to manage market price risks resulting from trading activities (in particular, risks arising from interest-rate fluctuations and currency fluctuations), and also serve to provide cover for on- and off-balance-sheet items within asset/liability management. Besides market risk, derivatives entail counterparty risk and, in the case of credit derivatives, which additionally serve to manage credit risk, also issuer risk.

For purposes of credit default risk, the positive fair values are relevant as replacement values for OTC derivatives. These represent the potential costs that HVB Group would incur to replace all of the original contracts with equivalent transactions in case of the simultaneous default by all counterparties.

On the basis of these replacement values and not taking into account any risk-reducing effects, the maximum counterparty risk for HVB Group as at 30 June 2024 totalled €198.3 billion (31 December 2023: €233.0 billion). The decline of €34.7 billion compared with year-end 2023 is primarily attributable to interest rate derivatives (down €37.1 billion), while equity/index derivatives recorded an increase (up €2.6 billion).

In accordance with the regulatory provisions under the CRR and taking account of the internal model method (IMM) that has been approved by the regulatory authorities for use by HVB to determine counterparty risk, risk-weighted assets for counterparty risk in HVB Group's derivatives business were €4.5 billion as at 30 June 2024 (31 December 2023: €5.0 billion).

The following tables provide detailed information on the nominal amount and fair values of all derivative transactions and credit derivative transactions of HVB Group.

Derivative transactions

		NOM	IINAL AMOU	NT			FAIR VA	LUE		
	RES	IDUAL MATU	RITY		TOTAL	POSI	TIVE	NEGA	NEGATIVE	
€ millions	UP TO 1 YEAR	MORE THAN 1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023	
Interest rate derivatives	2,532,771	2,226,924	2,079,867	6,839,562	7,812,650	178,995	216,113	178,440	213,467	
Foreign exchange derivatives	288,346	47,807	1,245	337,398	279,834	3,168	3,306	2,679	3,077	
Cross-currency swaps	36,295	109,537	55,898	201,730	198,606	3,686	4,604	5,645	6,227	
Equity/index derivatives	113,524	64,984	7,455	185,963	157,434	9,018	6,456	6,540	5,141	
Credit derivatives	1,157	2,884	331	4,372	12,427	34	185	46	203	
- Protection buyer	791	2,083	156	3,030	6,930	19	14	39	201	
- Protection seller	366	801	175	1,342	5,497	15	171	7	2	
Other transactions	28,786	18,064	203	47,053	45,926	3,440	2,369	1,846	1,272	
HVB Group	3,000,879	2,470,200	2,144,999	7,616,078	8,506,877	198,341	233,033	195,196	229,387	

Derivative transactions with a residual maturity of up to three months accounted for a nominal total amount of €1,102,812 million as at 30 June 2024 (of which credit derivatives: €334 million).

Derivative transactions by counterparty type

	FAIR VALU	JE	FAIR VALU	E
	POSITIVE	.	NEGATIVE	
€ millions	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Central governments and central banks	3,079	3,572	1,091	1,150
Banks	109,165	124,100	107,647	123,587
Financial institutions	81,545	100,445	83,142	100,946
Other companies and private individuals	4,552	4,916	3,316	3,704
HVB Group	198,341	233,033	195,196	229,387

2 Market risk

The economic capital for market risk at HVB Group, without taking account of diversification effects between different risk types, amounts to €2,146 million (31 December 2023: €2,975 million). The decline in economic capital is primarily the result of taking into account diversification effects between market and pension risk, which has been determined since June 2024 using an historical simulation in the same way as market risk.

The following table shows the aggregated market risk for internal risk controlling at HVB Group. Most of the market risk arises from positions of the Corporates operating segment of HVB Group.

Market risk of HVB Group (VaR, 99.00% confidence level, one-day holding period)

		IARKET RISK S RECOGNISED A	MARKET RISK OF POSITIONS RECOGNISED AT FVTOCI			
	AVERAGE	PERIOD EN	ND	AVERAGE	PERIOD EN	ND.
€ millions	2024	30/6/2024	31/12/2023	2024	30/6/2024	31/12/2023
Credit spread risk	2.8	2.3	3.3	7.8	9.0	7.1
Interest rate positions	5.1	4.3	3.8	6.0	3.7	11.0
Foreign exchange positions	1.4	1.3	1.1	0.2	0.3	0.1
Equity/index positions ¹	2.1	2.9	1.3	_	_	
Commodity risk	1.1	1.4	0.9	_	_	_
HVB Group ¹	5.6	4.2	7.6	8.7	4.2	8.9

¹ Because of the diversification effects between the risk categories, the total risk is less than the sum of the individual risks.

The regulatory capital requirements for the quarter-ends of the previous year are described below. broken down by the relevant risk metrics.

Regulatory capital requirements of HVB Group

€ millions	30/6/2024	31/3/2024	31/12/2023	30/9/2023	30/6/2023
Value at risk	42	43	49	65	79
Stressed value at risk	103	113	102	118	118
Incremental risk charge	59	78	85	79	93
Market risk standard approach	27	30	35	32	32
CVA value at risk	9	10	12	15	16
Stressed CVA value at risk	38	34	31	30	30
CVA standard approach	25	29	32	33	38

Regulatory back-testing of the internal model at HVB

The forecasting quality of the VaR measurement method is reviewed by means of daily back-testing that compares the computed regulatory VaR figures with the changes in the hypothetical portfolio value and additionally with the actual profit/loss. Reportable back-testing outliers occurred in the last 250 days. On two days the hypothetical loss was greater than the VaR figure; furthermore, on three days the actual daily loss was greater than the forecast VAR figure.

In addition to back-testing, further methods are used to check the quality of the model. These involve analysing the risk factors used and adjusting them as required. Risks that cannot be adequately modelled are also monitored and limits set for them if they are material. Furthermore, the suitability of the modelling of the UniCredit risk model used throughout the Group is validated by the "Group Internal Validation" unit.

Market liquidity risk

Market liquidity risk relates to the risk that the Bank will suffer losses due to the disposal of assets that can only be liquidated on the market at a discount. In an extreme case, HVB Group may not be able to sell such an asset, as the market does not offer enough liquidity, or the Bank holds a position that is too large relative to market turnover. The CRO organisation is responsible for managing market liquidity risk and conducts advanced market liquidity analyses. These uncertainties in the amount of €29 million are taken into account in the income statement in the form of valuation adjustments and in capital withdrawals via additional valuation adjustments of €53 million.

Interest rate risk in the banking book

The interest rate risk in the banking book describes the risk relating to the Bank's capital and income caused by changes in interest rates. The strategy of the interest rate risk in the banking book aims to reduce fluctuations in net interest income as a result of interest rate movements over several years by hedging deposits and capital as well as early mortgage loan repayments in line with internal models. Parameters are based on statistical analyses. Market risk also includes the behavioural model risk, which represents the statistical uncertainty involved in the model assumptions for sight and savings deposits as well as the early repayment of mortgage loans.

HVB Group measures and monitors interest rate risk in terms of the change in the economic value as well as the income of the Bank. In this context, consistent methods and models as well as limits or thresholds are ensured for the sensitivity of net interest and the present value. Interest rate risk exposure from commercial banking transactions is managed and hedged by the Treasury department. The market risk of the Treasury department is monitored on a daily basis. Present value-based measurement shows the effects of fluctuations in the interest rate on the economic value of assets and liabilities as a relevant risk measure. The absolute change in present value and the coefficients from the change in present value and regulatory own funds are calculated on a monthly basis, taking into account the supervisory requirements, in the event of a 200bps increase or a 200bps decrease in interest rates. In addition, six further interest rate scenarios are calculated as early warning indicators, in which, however, the changes in present value are considered in relation to the core capital. In December 2023, the 200bps increase in interest rates and the parallel shift upwards as an early warning indicator resulted in the greatest negative changes in present value. The interest rate scenarios stated are calculated according to the BaFin Circular 6/2019 (BA) on interest rate risk in the banking book. The evaluations are carried out as required without taking account of the hedge effect from the model book for own funds from a regulatory perspective. In accordance with the European Banking Authority, additional modified model assumptions have been included in the calculation of sight and savings deposits.

Information on interest rate risk in the banking book

	30/6/20	30/6/2024		023
	€ millions	in %	€ millions	in %
+ 200 basis points	(1,728)	(9.2)	(1,796)	(9.5)
- 200 basis points	927	4.9	816	4.3

HVB Group is well below the specified 20% mark, above which the banking supervisory authorities consider a bank to have increased interest rate risk, and below the 15% mark, which is seen as an early warning indicator. These figures include HVB's positions as well as the positions of the material Group companies, customer margins are not included.

In addition to the present value approach, a simulation of net interest in the banking book is performed for HVB Group on a monthly basis. This analysis focuses on the impact that changes in interest rates have on net interest income compared with the benchmark scenario over a defined time horizon. The scenarios are limited internally with parallel shifts of 100bps to 400bps upwards (parallel upwards) or downwards (parallel downwards) in the yield curve according to the EBA's Supervisory Outlier Test (SOT), with the yield curve in euro shifting by 200bps in each case. In addition, positive contributions from the currencies are weighted at 0.5. Assumptions regarding the elasticity of sight and savings deposits are also taken into account. Depending on the contractual agreement with the customer, a floor of 0% could be employed for commercial banking products. In such a case, the interest rate shock downwards would not be fully applied. The simulation is calculated based on the assumption that the balance remains constant. The sensitivity of income (NII sensitivity) is then obtained from the resulting changes in income in relation to Tier 1 capital. The results are below the internal early warning indicator of minus 4.5%.

Effects of interest rate changes on net interest

	30/6/2024		31/12/20231	
	€ millions	in %	€ millions	in %
Parallel upwards	83	0.5	98	0.6
Parallel downwards	(183)	(1.0)	(232)	(1.3)

¹ Due to the entry into force of the new EBA SOT scenarios, which relate to Tier 1 and no longer to the budgeted NII, the previous year's figures have been adjusted to ensure compatibility between the reporting dates.

The changes in results compared with the previous year can be explained by the changed positions.

Furthermore, additional stress test scenarios are considered to estimate the basis risk (resulting from the imperfect correlation in interest rate benchmarks for different instruments and products) and the effects of nonparallel shocks.

3 Liquidity risk

Short-term liquidity risk

Within the framework of our limit system, we showed an overall positive balance of short-term liquidity risk of €31.1 billion at HVB Group for the three-month maturity bucket as at 30 June 2024 (31 December 2023: €43.4 billion). The holding of available securities eligible as collateral for central bank borrowings that can be employed on the next banking day to compensate for unexpected outflows of liquidity, is at €46.1 billion (31 December 2023: €41.5 billion).

Institution-specific, market-wide and combined scenarios are included in the calculation of our stress tests. The calculations at the end of the first half of 2024 showed that the available liquidity reserves will cover our funding requirements beyond the minimum period required in each case.

The liquidity coverage ratio (LCR) of at least 100% to ensure that an institution is able to meet its short-term payment obligations was met throughout the course of 2024. The weighted average liquidity cover ratio according to the EU directive on prudential requirements for credit institutions and investment firms is at 141% for the twelvementh average at the end of June 2024 (31 December 2023: 148%). The following table shows the individual components of the weighted liquidity cover ratio.

	Adjusted (weig	total value hted)
Liquidity cover ratio components	30/6/2024	31/12/2023
Number of data points used in calculating the average values (weighted)	12	12
High quality liquid assets (HQLA) in € billions	59.4	61.9
Total net average outflows in € billions	42.0	41.8
Liquidity cover ratio (LCR) in %	141	148

Structural liquidity risk

The structural liquidity risk (funding risk) of HVB Group was again low in the first half of 2024 thanks to our broad funding base in terms of products, markets, and investor groups. This ensured that we were able to obtain adequate funding for our lending operations in terms of volume and maturity within the framework of our limit system. By the end of June 2024, HVB Group had obtained longer-term funding with a volume of €1.5 billion (30 June 2023: €6.1 billion). Our Pfandbriefe remain an important funding instrument; in the first half of 2024 a volume of €0.8 billion (30 June 2023: €3.8 million) was funded externally on the capital market. Since June 2021, the NSFR has been subject to a mandatory minimum ratio of 100%, which was complied with in the reporting period. The internal structural liquidity ratios "greater than one year and greater than three years" were over 100% in the first half of 2024.

4 Operational risk

The operational risk of HVB Group is calculated for HVB and its material subsidiaries – HVB Immobilien AG and UniCredit Leasing GmbH (together with subsidiaries) - using an internal model in accordance with the Advanced Measurement Approach (AMA model). The standard approach is applied for all other subsidiaries in the respective area of application.

The AMA model is based mainly on internal and external loss data. The process involves computing loss distributions for each model risk category. A model risk category is determined by combining the Basel loss event category and the product category of the loss event. Scenario data are used to complete the data for rare yet extreme events. The method used to aggregate the individual data sources is based on the Bayesian model and is applied to the loss distribution parameters for each model risk category.

The VaR is determined using a Monte Carlo simulation. The VaRs of the individual model risk categories are modified to reflect internal control and business environment factors. In the aggregation, correlations between the model risk categories and risk-reducing measures, such as insurance policies, are taken into account.

In line with UniCredit's approach, operational risk capital is calculated based on the Advanced Measurement Approach (AMA) at the level of the UniCredit corporate group as a whole and then distributed as a first step to the subgroups (known as hubs), including HVB Group, and as a second step, to the AMA subsidiaries, using a risksensitive allocation mechanism.

The model was developed by UniCredit S.p.A. HVB checks the plausibility of the calculation results at regular intervals. The AMA model is validated on an annual basis to ensure that it is appropriate.

Information technology (IT)

UniCredit S.p.A. provides most IT services for HVB Group. IT services needed to meet special requirements of HVB subsidiaries are provided by additional selected providers. In this connection, both HVB and HVB Group adhere to a control framework set by the UniCredit corporate group in order to monitor and manage all significant IT and cyber risks adequately within the ICT management processes, among other things. Any such outsourcing of activities to further providers is subject to clear IT compliance guidelines and will also be monitored in the context of the overarching control processes.

Business continuity management, IT service continuity management and crisis management

The business continuity, IT service continuity and crisis management function demonstrated its effectiveness and appropriateness by successfully mastering critical situations. In addition, the precautions taken for crisis and emergency situations are adapted constantly to accommodate new threats. In principle, responsibility for managing these risks lies with the person responsible for the process and the associated senior management. Comprehensive monitoring and reporting of the residual risks identified is carried out by the Business Continuity & ECM.

Legal risk and compliance risk

Legal risk as a subcategory of operational risk is defined as the possibility of losses, damage or costs caused by lack of knowledge of the current legal situation or by a delay in reacting to changes in the law, insufficient and/or inadequate application of the law or unforeseeable changes to case law and/or the interpretation of the law by the authorities.

The Legal department is responsible for managing legal risk and provides advice on legal matters to all units of HVB. Excluded from this are tax law, labour law, data protection and the legal areas covered by compliance, which are overseen by the respective functional departments.

Compliance risk is defined as an existing or future risk to income or capital as a consequence of infringements of or non-compliance with laws, regulations, statutory provisions, agreements, mandatory practices or ethical standards. This may result in fines, compensation for damage and/or contracts being rendered null and void in addition to damaging a bank's reputation.

The management of compliance risk is normally a task of the Bank's Executive Board. Pursuant to Section 25a of the German Banking Act (Kreditwesengesetz – KWG), it is required to ensure that a proper business organisation is in place, encompassing in particular effective risk management, including an internal control system (ICS). Part of the ICS is the compliance function (second line of defence), which helps the Executive Board to manage compliance risk. In terms of the three lines of defence, however, the business units have the task (first line of defence) of knowing, managing and mitigating their own compliance risks.

The Minimum Requirements for Compliance (MaComp) and MaRisk both require a compliance function to be put into place. Both also contain rules on how such a compliance function should be structured. At HVB, both functions are combined in the Compliance unit in order to ensure a uniform approach. Anti-money laundering and fraud prevention as well as preventive measures against infringements of financial sanctions and embargos are also assigned to the Compliance unit. Comprehensive risk assessment is ensured by this approach. On account of its high degree of specialisation, tax compliance is managed and refined within the finance organisation exclusively by the Tax Affairs unit.

Legal risks

HVB and other companies belonging to HVB Group are involved in various legal proceedings. The following is a chronological summary of cases against HVB and other companies belonging to HVB Group, which individually or collectively in the respective subject areas have a value in dispute exceeding €50 million or are of substantial significance for HVB for other reasons.

In many cases, there is substantial uncertainty regarding the outcome of the proceedings and the amount of possible damages. These cases include criminal or administrative proceedings by the relevant authority and claims in which the petitioner has not specifically quantified the amounts in dispute. In all proceedings where a loss is considered likely, and it is possible to reliably estimate the amount of possible losses, provisions have been set up based on the circumstances and consistent with IFRS accounting principles applied by HVB Group. Whether and to what extent a provision has been set up in proceedings is not disclosed if the outcome of the proceedings could be affected by such disclosure.

VIP 4 Medienfonds

Various investors in Film & Entertainment VIP Medienfonds 4 GmbH & Co. KG to whom the Bank issued loans to finance their participation, brought legal proceedings against HVB. In the context of the conclusion of the loan agreements, the plaintiffs claim that the Bank provided inadequate disclosure about the fund structure and the related tax consequences. A settlement was reached with the vast majority of the plaintiffs. An outstanding final decision with respect to the question of HVB's liability for the prospectus in the proceeding pursuant to the Capital Markets Test Case Act (Kapitalanleger-Musterverfahrensgesetz) which is pending at Munich Higher Regional Court, will affect only a few pending cases.

Proceedings related to claims for withholding tax credits

On 31 July 2014 the Supervisory Board of HVB concluded its internal investigations into the so-called "cum-ex" transactions (the short selling of equities around dividend dates and claims for withholding tax credits on German share dividends) at HVB. In this context, criminal investigations have been conducted against current or former employees of HVB and HVB itself as an ancillary party by the Prosecutors in Frankfurt/Main, Cologne and Munich. With respect to HVB, all proceedings originally initiated by the aforesaid prosecution offices were finally closed with payment of a fine or the payment of a forfeiture.

In December 2018, in connection with an ongoing investigation against other financial institutions and former Bank employees, HVB was informed by the Cologne Prosecutor of the initiation of a new investigation in connection with an administrative offence regarding "cum-ex" transactions involving Exchange Traded Funds ("ETF"). In April 2019 these investigations were extended to so called ex/ex-transactions, in which an involvement of the Bank in the sourcing of cum/ex transactions of other market participants on the ex-day is suspected. The facts are being examined internally. HVB is cooperating with the authorities.

On 28 July 2021, the Federal Criminal Court (BGH) rendered a decision through which the principle criminal liability of cum/ex structures was determined the first time. With its decisions of 6 April 2022, 17 November 2022 and 20 September 2023 the BGH confirmed three criminal judgements in other cum-ex cases of the Regional Court of Bonn, thus further solidifying its case law. The Federal Constitutional Court rejected several complaints against decisions of the BGH, thereby confirming the case law of the BGH. HVB is monitoring the development.

In June 2023, the Munich tax authorities completed a regular field audit of HVB for the years 2013 to 2016 which includes, among other things, a review of transactions in equities around the dividend record date (so called cum/cum transactions). During these years HVB performed, among other things, securities-lending transactions with different domestic counterparties which include, but are not limited to, different types of cum/cum transactions. It still remains to be clarified whether, and under which circumstances, tax credits can be obtained or taxes refunded with regard to different types of cum/cum transactions. Some of the taxes credited from the cum/cum transactions are currently not recognized for tax purposes by the tax audit. HVB appealed against the tax assessments for 2013 to 2015, which were amended based on the findings of the tax audit regarding cum/cum transactions. Moreover, with respect to cum/cum transactions in which the counterparty of HVB claimed tax credits in the past, it cannot be ruled out that HVB might be exposed to third party claims under civil law.

Financial sanctions matters

Following the settlement in April 2019, the U.S. and New York Authorities require an annual external review regarding the evolution of the process implementation. In light of the request, in 2020, the Group appointed an external independent consultant. Following the interaction with the independent consultant and also considering the mandatory commitments towards the Authorities, HVB has implemented additional requirements and controls, about which the bank makes periodic reports to the Authorities. According to the positive outcomes of the reviews, the Federal Reserve has suspended the external independent consultant's review going forward.

Euro-denominated bonds issued by EU countries

On 31 January 2019 UniCredit S.p.A. and HVB received a Statement of Objections from the European Commission referring to the investigation by the European Commission of a suspected violation of antitrust rules in relation to European government bonds. The subject matter of the investigation extended to certain periods from 2007 to 2011 and included activities by HVB between September and November 2011. The European Commission concluded its investigation by issuance of its decision on 20 May 2021. The decision provides for the imposition of a fine of €69.4 million on the parent company UniCredit S.p.A and HVB. UniCredit S.p.A. and HVB contest the European Commission's findings and brought an action for the annulment of its decision before the General Court of the European Union on 30 July 2021.

On 11 June 2019, HVB and UniCredit Capital Markets LLC were named, among other financial institutions, as defendants in a putative class action already pending in the United States District Court for the Southern District of New York. The third amended class action complaint, filed on 3 December 2019, alleges a conspiracy among dealers of Euro-denominated bonds issued by European central banks to fix and manipulate the prices of those bonds, among other things by widening the bid-ask spreads they quoted to customers. The putative class consists of those who purchased or sold Euro-denominated bonds issued by European central banks in the US between 2007 and 2012. On 23 July 2020, the court granted motions to dismiss the third amended complaint by certain defendants, including HVB and UniCredit Capital Markets LLC, without prejudice. Plaintiffs filed their fourth amended class action complaint on 9 February 2021, repleading their claim against HVB and UniCredit Capital Markets LLC and other financial institutions. Like earlier pleadings, the fourth amended class action complaint does not include a quantification of damages claimed. On 14 March 2022, the court granted UniCredit Capital Markets LLC motion to dismiss while denying HVB's motion to dismiss. The court has since denied HVB's motion for reconsideration, HVB has answered the operative complaint, and discovery has commenced. On 25 September 2023, the court granted plaintiffs leave to file a fifth amended class action complaint, which plaintiffs did on 16 October 2023 and continued to name HVB among others (but not UniCredit Capital Markets LLC) as a defendant. HVB reached a settlement with the plaintiffs and the putative class in May 2023, and the court preliminarily approved that settlement on 16 May 2023. On 19 April 2024, the court granted final approval of HVB's settlement with the plaintiffs and the putative class and entered final judgment.

Claims in relation to a syndicated loan

HVB, together with several other financial institutions, has been named as a defendant in complaints filed by the judicial administrator and foreign representative of a Brazilian oil and gas conglomerate in July 2021 in the United States before the Southern District of New York court claiming damages in connection with the repayment of a syndicated loan for two oil drilling rigs in which HVB participated that defendants are alleged to have unlawfully obtained.

Claims in relation to sanctions legislation

Two aircraft leasing companies filed lawsuits in March and April 2022 against HVB's foreign branch in London before a London court. The claims relate to payments arising under certain letters of credit, all of which are governed by English law. The disputes hinge on the interpretation of sanctions legislation and its effect on the letters of credit. After the trial, UK licences authorising payments under the letters of credit were granted and HVB London branch made payments of the principal under the letters of credit to the claimants in autumn 2022. In spring 2023, HVB London branch was nevertheless ordered to pay interest and legal costs. In June 2024, the English Court of Appeal overturned this decision, finding in HVB London branch's favour that it was prohibited from making any payments to the claimants of the principal under the letters of credit until the UK licences were granted. There may be a further appeal to the English Supreme Court.

Claims in relation to guarantee payments and sanctions

In August 2023, HVB was named as a defendant in a lawsuit pertaining to guarantee claims commenced by a Russian energy company before a court in Saint Petersburg, Russia. HVB had issued part of a guarantee package in favour of the Russian company on behalf of a German guarantee client. The Russian company had drawn down the guarantees by making payment claims to HVB, which HVB could not fulfil under the applicable EU sanctions. The guarantees are governed by English law and contain an arbitration agreement providing for ICC arbitration seated in Paris. On 29 January 2024, the English Court of Appeal reversed an earlier decision denying a permanent anti-suit injunction (ASI) and granted a final ASI requiring the Russian company to immediately take all steps necessary to withdraw the Russian proceedings. The Court of Appeal's decision was upheld by the English Supreme Court on 23 April 2024.

The Russian court has rejected HVB's jurisdictional defenses and in May 2024 approved certain injunction measures against HVB which operate to arrest securities, cash and real estate property held by HVB in Russia (if any) in the amount of the claim. The Russian court has also joined AO UniCredit Bank (a member of the UniCredit Group and a bank operating in Russia) as a co-defendant in the lawsuit. At a hearing on 26 June 2024, the Russian court fully satisfied the Russian company's claims and held both HVB and AO UniCredit Bank jointly and severally liable. This court decision will enter into force after one month from the date the full court decision is published unless it is appealed within that period. HVB is evaluating its further strategy regarding this dispute with the Russian company and may take steps to appeal the decision in Russia as well as seek other legal remedies.

Claims in relation to counter guarantees and sanctions

In April 2024 HVB has been named as a defendant in a lawsuit pertaining to guarantee claims commenced by AO UniCredit Bank (a member of the UniCredit Group and a bank operating in Russia) before a court in Moscow, Russia. HVB issued counter-guarantees to AO UniCredit Bank for guarantees by that bank to a Russian company. Upon payment by AO UniCredit Bank to the Russian company out of the guarantees, AO UniCredit Bank made payment claims under the counter-guarantees to HVB, which HVB could not fulfil under applicable EU sanctions. After dealing with procedural questions in a hearing on 14 June 2024, the Russian court scheduled the next hearing for the third guarter of 2024.

5 Other risks

In the section entitled "Other risks", HVB Group collates the following types of quantifiable risk: real estate risk, business risk, pension risk, reputational risk, financial investment risk and model risk as well as the risk type strategic risk, which is described exclusively in qualitative terms. The risk arising from outsourcing activities and the sustainability risk are not treated as a separate risk type at HVB Group but are considered a cross-risk type and are consequently listed under other risks.

Real estate risk

A fundamental distinction is made in real estate risk between real estate required for operations (used by the Bank) and real estate that is not used for operations (not used by the Bank).

Real estate management ensures value- and cost-optimised management, the operation of the buildings and the fulfilment of the UniCredit Bank GmbH's space requirements in terms of size, quality and cost optimisation. The longer-term orientation for real estate used by the Bank corresponds with the Bank's strategy of preferring Bank-owned properties over rented properties for own use and making such properties available for the banking operations of HVB Group at market terms on a cost-optimised basis.

The main risks for the Bank-owned portfolio primarily stem from the development of the market value. The risk drivers are the future usage by the Bank, market rents, occupancy rate, required investment and the price development on the real estate market. ESG criteria are also included as important factors for portfolio strategy, maintenance and investment decisions. The medium-term goal for the real estate portfolio not used by the Bank, on the other hand, is to realise the best possible value upon disposal of the portfolio; in this regard, the impact on both the income statement and the Bank's other management instruments is crucial for the individual decisions. This tallies with the overarching strategy for dealing with real estate risk.

The economic capital for real estate risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk charge, amounts to €264 million as at 30 June 2024, which represents a decrease of €7 million (31 December 2023: €271 million). The fully diversified economic capital for real estate risk at HVB Group stands at €138 million (31 December 2023: €138 million).

The risk figures relate to a portfolio valued at €2,307 million.

Breakdown of the real estate portfolio by type

	PORTFOLI	O VALUE	SHA	SHARE		
	€ milli	ions	in %	6		
	30/6/2024	31/12/2023	30/6/2024	31/12/2023		
Real estate used by the Bank	1,875	1,925	81.3	81.3		
Real estate not used by the Bank	432	443	18.7	18.7		
HVB Group	2,307	2,368	100.0	100.0		

The decline in the real estate portfolio compared to the end of 2023 is primarily due to changes in the market values of the Bank-owned real estate portfolio.

The impact of macroeconomic scenarios on real estate risk is analysed within the scope of the cross-risk-type stress tests.

Business risk

The strategy for business risk is based on the direction of business over the medium term and is reflected in planning. As part of its general cost and income management, each business unit is responsible for the operational management of business risk.

The economic capital for HVB Group's business risk, without taking account of diversification effects between the risk types and without the model risk charge, amounts to €288 million as at 30 June 2024 (31 December 2023: €291 million). The fully diversified economic capital for HVB Group's business risk totals €190 million as at 30 June 2024 (31 December 2023: €188 million).

The impact of macroeconomic scenarios on business risk is analysed within the scope of the cross-risk-type stress tests.

Pension risk

In risk management, pension risk is regularly calculated and monitored in line with the market risk method. Using a simplified procedure, historical simulations are carried out for the most important risk parameters of the various capital investments and cash flows on the commitment side. The resulting risk figure is taken into account when calculating the risk-bearing capacity with full diversification for market risk. HVB Group's total pension risk as at 30 June 2024 was calculated at a value of €721 million (31 December 2023: €1,048 million). The decrease compared to the end of 2023 is primarily due to diversification effects with positions in market risk as a result of the new method of calculation. Furthermore, the effects on pension risk are regularly examined as part of the cross-risk stress tests.

Risk Report (Continued)

The direction of interest rates still appears to be the main driver of risks when determining the amount of recognised pension obligations. After the strong increase in 2022, yields declined in 2023 with significant year-on-year fluctuations during the year. The current level of interest rates makes it easier to generate returns on plan assets from the fixed-income securities segment. Despite the downward trend, inflation remained above the medium/long-term actuarial assumptions. This led to corresponding pension adjustments and an increase in obligations above the actuarial assumptions already taken into account. Funding has accordingly fallen slightly despite the good performance of the investments. Central banks seem determined to continue fighting inflation with key interest rates that remain fairly high. Inflation is expected to continue to decline slowly, which should result in the first key interest rate cuts over the course of the year. The comparatively high level of interest rates could, however, also affect the still weak economic development and, as a result, lead to an increase in volatility on the capital markets with potentially negative effects on the asset side, and particularly in equities. There is also a certain risk that inflation will remain more persistent and that central banks may stick to a restrictive monetary policy for even longer. The diverse geopolitical risks also contribute to a challenging environment.

Financial investment risk

The financial investment portfolio mainly consists of holdings in unlisted companies, equity derivatives and other fund shares (real estate funds and other closed-end funds). All the investments to be included in financial investment risk are either considered strategic and allocated to a business area or competence line, or deemed non-strategic and connected with the fundamental goal of reduction.

The risk from holdings in unlisted companies has been included under credit risk since September 2020. The following risk drivers are relevant for financial investment risk: the carrying amounts of investments and the related residual capital contribution liabilities and the macroeconomic situation. In addition, risks from hedge funds, private equity funds (including issuer risks from the trading book) and FX risks from the investment portfolio are included in the calculation of the market risk.

Breakdown of the financial investment portfolio

	PORTFOLI € mill			SHARE in %		
	30/6/2024	31/12/2023	30/6/2024	31/12/2023		
Private equity investments	10	10	3.8	3.9		
Other investments ¹	242	239	96.2	96.1		
HVB Group	252	249	100.0	100.0		

¹ Listed and unlisted investments.

The impact of macroeconomic scenarios on financial investment risk within credit risk is examined in the course of cross-risk-type stress tests.

Strategic risk

The statements made on strategic risk in the 2023 Annual Report still apply. Changes in the performance of the overall economy and the ratings of HVB are shown in the section entitled "Economic report" in this Interim Management Report.

Reputational risk

HVB and its most important subsidiaries apply a holistic approach to reputational risk management. This means that all significant new activities and transactions at the Bank are analysed with regard to reputational risk as a basic rule ("change-the-bank" approach) and individual units at the Bank are examined at regular intervals for latent reputational risk at the same time ("run-the-bank" approach).

Commercial transactions and new activities such as new product processes, outsourcing, projects and particular investments (such as special purpose vehicles) are included in the "change-the-bank" approach, as well as any other new activity as is appropriate. The employees responsible in each case are required to analyse the transactions/activities to identify any reputational risk, taking into account the existing guidelines. Once a reputational risk has been identified, the appropriate specialist departments are called in who will assess the reputational risk identified in terms of quality. The final decision based on the risk analysis and qualitative assessment is the responsibility of the Non-Financial Risk and Control Committee or the head of Non-Financial Risks.

Under the "run-the-bank" approach, the individual units of the Bank are examined at regular intervals for existing and/or latent reputational risk. For this purpose, senior management is interviewed about the current reputational risk. Senior managers then have the opportunity to review the reputational risk identified in their unit and add any further material reputational risks. Where it is possible and makes sense to do so, additional countermeasures are defined for the individual reputational risks.

Within the framework of the "run-the-bank" approach, the risk is classified in accordance with a three-tier system (traffic light logic). This involves determining the aggregate risk across two dimensions: impact on the income statement and probability of occurrence.

The individual business areas and central units are responsible for reputational risk management. Overall responsibility for monitoring rests with the Non-Financial Risks unit (CRO organisation). The Non-Financial Risks unit consolidates the results of senior management interviews and prepares a yearly RepRisk Report covering the greatest reputational risks at HVB.

In addition to the "change-the-bank" and the "run-the-bank" approach, UniCredit's method for quantifying reputational risk was introduced at HVB Group in the first quarter of 2020. For the purposes of quantification, reputation risk is defined as the impact of "negative sentiment" in the opinion-forming media (press, television, online media) on UniCredit's future profits generated by the reporting of an event that has a negative impact on the Bank's reputation.

Risk Report (Continued)

UniCredit's method for quantifying reputational risk is based on measuring the semi-elasticity between the development of the Media Tonality Index (a measure whose development reflects changes in UniCredit's reputation) and the development of the idiosyncratic portion of the expected profits. The economic capital for reputational risk is based on the value-at-risk (VaR) measure, which is calculated at a confidence level of 99.90% and is derived from the distribution of expected declines in profit.

The economic capital for reputational risk is calculated on a quarterly basis at UniCredit corporate group level and – based on the weighted "ratio of capital for the subsidiary's operational risk to the capital for the UniCredit corporate group's operational risk" – distributed between the subsidiaries of UniCredit corporate group.

The Non-Financial Risks unit checks the results obtained from calculating the economic capital for HVB Group's reputational risk for plausibility on a quarterly basis. The method for the quantification of reputational risk is validated at regular intervals.

The impact on reputation risk stemming from a change in sentiment about UniCredit in the opinion-forming media is examined in the course of cross-risk-type stress tests. The extent of this change is determined by assessing the severity of the respective macroeconomic scenario.

Model risk

Model risk is taken into account via a charge, which reflects the risk of model weaknesses due to data errors, inaccurate assumptions and incorrect methodology within the framework of ICAAP calculations. The estimation of this economic capital component is based on an internally developed methodology. The results of this methodology are converted into model risk percentages based on defined scoring functions and added to the risk types. A model risk percentage is also taken into account for the risk aggregation model, which aims to estimate the diversification benefit. In this case the relevant model risk percentage is applied directly to the diversification benefit. The model risk charge is also taken into account in the limitation of economic capital.

The model risk charge amounted to €142 million as at 30 June 2024 (31 December 2023: €160 million).

Sustainability risk

In addition to the "Social and Corporate Governance" component, HVB Group focuses in particular on the "Climate & Environment" (C&E) component.

Climate and environment (C&E) factors relate to the quality and functioning of the natural environment and systems and include factors such as climate change, biodiversity, energy consumption, air pollution and waste management. These are factors that can have a negative financial impact through various risk drivers.

These can be categorised into physical and transitional risks:

- Physical risks relate to adverse financial effects from climate change, including more frequent extreme weather events and gradual global warming, as well as environmental degradation (e.g. water and land pollution. biodiversity loss and deforestation). Physical risks are divided into "acute" caused by extreme weather events (such as droughts, floods and storms) and "chronic" caused by ongoing climate change (such as rising sea levels, loss of biodiversity, scarcity of resources). These can directly result in damage to buildings and reduced productivity.
- Transitional risks relate to the financial loss to the institution that may result directly or indirectly from the process of transitioning to a low-carbon and more environmentally friendly, sustainable economy. For example, this could be triggered by an abrupt shift in climate and environmental policy, technological progress or changing consumer behaviour.

Social and corporate governance factors relate to rights, the welfare of people and communities, including the organisational management of environmental and social factors in terms of strategy and processes.

Sustainability risk is materialising across the traditional risk types (credit risk, market risk, operational and reputational risk, liquidity and funding risk) and is gradually being integrated into risk monitoring within the framework of a project.

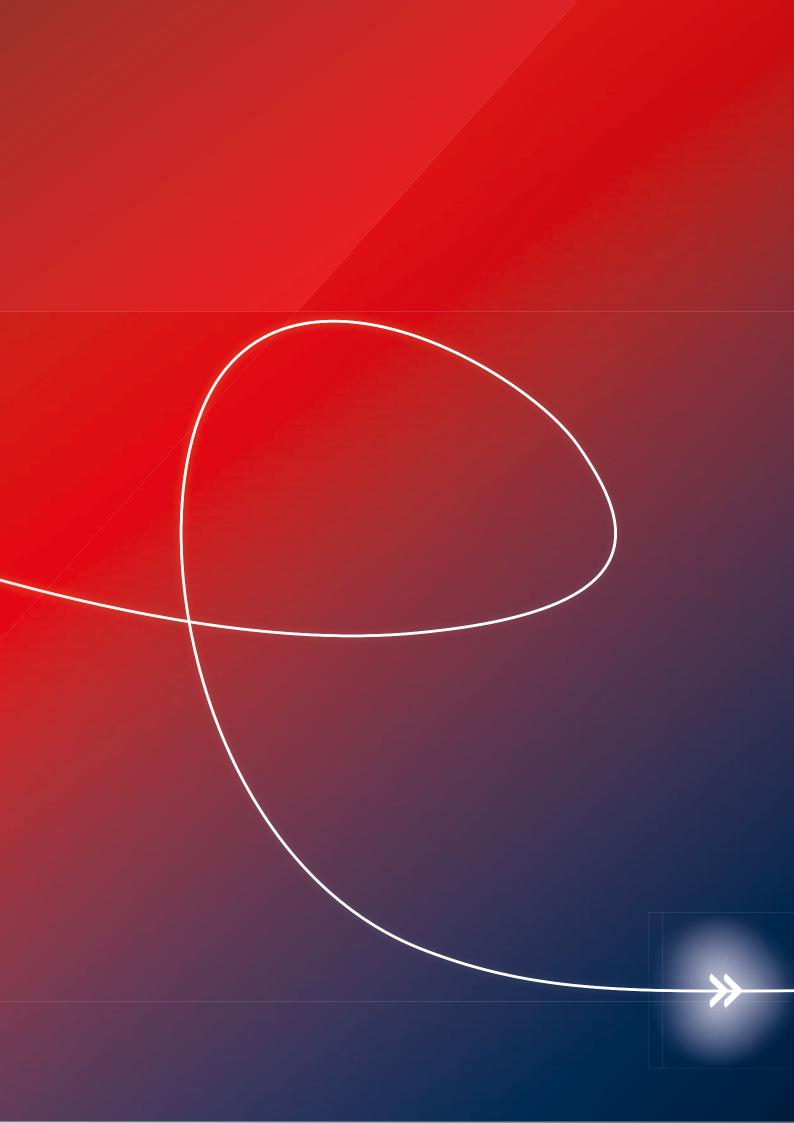
Risks arising from outsourcing activities

Outsourcing involves the transfer of activities and processes to intragroup and external service providers. Parts of the operational risk can also be mitigated by transferring the liability, while contractual risks arising from the outsourcing arrangement remain within HVB or a subsidiary of HVB Group. An outsourcing arrangement is deemed to exist when a different company is contracted to carry out activities and processes in connection with the performance of banking business, financial services or other typical banking services that would otherwise be performed by the outsourcing company itself. This includes outsourcing arrangements within UniCredit as well as the subcontracting of outsourced activities and functions to subcontractors.

Outsourcing risk is considered a cross-risk-type risk at HVB Group and is not treated as a separate risk type. Outsourcing activities affect the following risk types in particular: operational risk, reputational risk, strategic risk, business risk, credit risk, market risk and liquidity risk. Those risks that are identified and assessed in an in-depth risk analysis are managed as part of the respective risk type. Specific risks arising from outsourcing activities that cannot be assigned directly to a specific risk type are managed by the unit responsible for the outsourcing in question.

The respective project team and defined functional departments (including Operational Risk Management, Compliance, Legal, Corporate Affairs & Documentation, Data Protection and Business Continuity Management) use a standardised procedure to classify outsourcing arrangements as "not critical/material" and "critical/material". An in-depth risk analysis covering the other risk types as well as operational risk is performed for all outsourcing arrangements. A retained organisation (RTO) responsible for the arrangement is set up for each outsourcing arrangement that manages the risks identified. The identified risks are incorporated in HVB Group's risk management in the processes defined for the risk types concerned. The operational risk managers help the project managers and the heads of the RTOs to prepare and/or update the related risk analyses. Other external service providers for whom aspects of ICT security, data protection or business continuity are relevant have been evaluated in a dedicated third-party risk management process since mid-2020.

In HVB Group, no new critical/significant outsourcing contract was concluded by HVB in the first half of 2024. In the HVB Group. As a result of the sale of Structured Invest S.A. within the HVB Group, contracts for ICT services with UniCredit International Bank Luxembourg S.A. and fund service contracts with Caceis Bank S.A., Luxembourg Branch, Caceis Fonds Service GmbH and Aztec Financial Services S.A. are no longer significant outsourcing activities within the HVB Group The change in the above-mentioned contracts did not result in a significant change in the risk.



Consolidated Statement of Total Comprehensive Income

Consolidated Income Statement

INCOME/EXPENSE (€ millions)	NOTE	1/1-30/6/2024	1/1-30/6/2023
Interest income		4,549	4,025
of which calculated using the effective interest method (based on classification according to IFRS 9)		3,924	3,303
Negative interest on financial assets		(2)	(3)
Interest expense		(3,277)	(2,620)
Negative interest on financial liabilities		1	3
Net interest	12	1,271	1,405
Dividends and other income from equity investments	13	27	24
Net fees and commissions	14	670	647
Net trading income	15	941	769
Net gains/(losses) on financial assets and liabilities at fair value	16	(78)	29
Net gains/(losses) on derecognition of financial instruments measured at cost	17	(1)	(2)
Net other expenses/income	18	37	(148)
Payroll costs		(612)	(665)
Other administrative expenses		(525)	(532)
Amortisation, depreciation and impairment losses on intangible and tangible assets		(44)	(79)
Operating costs	19	(1,181)	(1,276)
Net write-downs of loans and provisions for guarantees and commitments	20	(132)	(50)
Provisions for risks and charges	21	20	(13)
Restructuring costs	22	2	(45)
Net gains/(losses) on remeasurement of consolidated companies	23	(2)	_
PROFIT/(LOSS) BEFORE TAX		1,574	1,340
Income tax for the period		(507)	(319)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))		1,067	1,021
attributable to the shareholder of UniCredit Bank GmbH		1,067	1,021
attributable to minorities		_	_

Consolidated Statement of Total Comprehensive Income

€ millions	1/1-30/6/2024	1/1-30/6/2023
Profit/(loss) after tax recognised in the income statement (consolidated profit/(loss))	1,067	1,021
Income and expenses recognised in other comprehensive income		
Income and expenses not to be reclassified to the income statement in future periods		
Actuarial profit/(loss) on defined benefit plans (pension commitments)	(51)	(43)
Allocation to/withdrawal from the revaluation surplus for owner-occupied property (IAS 16)	(24)	(71)
Change in the fair value of financial liabilities at FVTPL attributable to changes in the default risk (own credit spread reserve)	6	(4)
Other changes	_	_
Taxes on income and expenses not to be reclassified to the income statement in future periods	22	48
Income and expenses to be reclassified to the income statement in future periods		
Changes from foreign currency translation	5	(2)
Changes in the measurement of financial instruments (hedge reserve)	6	(1)
Unrealised gains/(losses)	6	(1)
Gains/(losses) reclassified to the income statement	_	_
Changes in the measurement of financial instruments at FVTOCI (FVTOCI reserve)	8	1
Unrealised gains/(losses)	13	_
Gains/(losses) reclassified to the income statement	(5)	1
Other changes	_	_
Taxes on income and expenses to be reclassified to the income statement in future periods	(5)	_
Total income and expenses recognised in equity through other comprehensive income	(33)	(72)
Total comprehensive income	1,034	949
of which:		
attributable to the shareholder of UniCredit Bank GmbH	1,034	949
attributable to minorities	_	_

Consolidated Balance Sheet

ASSETS (€ millions)	NOTE	30/6/2024	31/12/2023
Cash and cash balances	24	10,841	23,293
Financial assets held for trading	25	69,625	68,611
Financial assets at FVTPL	26	3,571	3,215
Financial assets at FVTOCI	27	12,591	9,252
Loans and receivables with banks (at cost)	28	22,139	19,566
Loans and receivables with customers (at cost)	29	159,213	154,477
Hedging derivatives	30	281	409
Hedge adjustment of hedged items in the portfolio fair value hedge		_	_
Investments in associates and joint ventures accounted for using the equity method	31	17	17
Property, plant and equipment	32	1,951	2,050
Investment properties	33	186	254
Intangible assets	34	10	6
Tax assets		758	893
Current tax assets		71	220
Deferred tax assets		687	673
Non-current assets or disposal groups held for sale	35	234	67
Other assets	36	985	1,182
TOTAL ASSETS		282,402	283,292

LIABILITIES (€ millions)	NOTE	30/6/2024	31/12/2023
Deposits from banks	37	39,205	35,673
Deposits from customers	38	136,828	139,557
Debt securities in issue	39	33,549	34,274
Financial liabilities held for trading	40	48,736	48,537
Financial liabilities at FVTPL	41	4,215	4,660
Hedging derivatives	42	95	103
Hedge adjustment of hedged items in the portfolio fair value hedge	43	(3,919)	(3,763)
Tax liabilities		1,473	1,178
Current tax liabilities		1,356	1,086
Deferred tax liabilities		117	92
Liabilities of disposal groups held for sale	44	_	13
Other liabilities		1,434	1,470
Provisions	45	1,512	1,650
Shareholders' equity		19,274	19,940
Shareholders' equity attributable to the shareholder of UniCredit Bank GmbH		17,584	18,250
Subscribed capital (share capital)		2,407	2,407
Additional paid-in capital		9,791	9,791
Other reserves		4,297	4,319
Currency reserves		23	18
Changes in valuation of financial instruments		(1)	(10)
Hedge reserve		2	(2)
FVTOCI reserve		(3)	(8)
Profit available for distribution		_	1,725
Consolidated profit 1/1-30/6/2024 ¹		1,067	_
Additional equity instruments		1,700	1,700
Minority interests		(10)	(10)
TOTAL LIABILITIES		282,402	283,292

¹ Attributable to the shareholder of UniCredit Bank GmbH.

In the 2023 financial year, the profit available for distribution disclosed in the annual financial statements of HVB, which forms the basis for the appropriation of profit, amounts to €1,725 million. On 25 March 2024, the Shareholders' Meeting of HVB passed a resolution to distribute the profit available for distribution of €1,725 million to our sole shareholder, UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a profit distribution of around €2.15 per share after a dividend of around €1.45 per share for the 2022 financial year. The profit available for distribution for 2023 was distributed on 6 May 2024.

Statement of Changes in Consolidated Shareholders' Equity

			OTHER RESERVES				
€ millions	SUB- SCRIBE D CAPITAL	ADDITIONAL PAID-IN CAPITAL	TOTAL OTHER RESERVES	OF WHICH OWN CRE DIT SPREAD	OF WHICH: REVALUATION RESERVE FOR OWN PROPERTIES	OF WHICH PENSIONS AND SIMILAR OBLIGATIONS (IAS 19)	CURRENCY RESERVE
Shareholders' equity as at 1/1/2024	2,407	9,791	4,319	(34)	822	(1,125)	18
Consolidated profit/(loss) recognised in the consolidated income statement	_	_	_	_	_	_	_
Total income and expenses recognised in equity through other comprehensive income ⁴	_	_	(47)	4	(16)	(35)	5
Unrealised gains/(losses) due to changes in measurement	_	_	(12)	4	(16)	_	_
Gains/(losses) reclassified to the income statement	_	_		_	_	_	_
Actuarial gains/(losses) on defined benefit plans	_	_	(35)	_	_	(35)	_
Changes from foreign currency translation	_			_			5
Other changes	_			_	_		_
Total other changes in equity	_		25	_	(29)		_
Capital increase	_			_	_		_
Reclassification from equity reserves to retained earnings	_	_	_	_	(3)	_	_
Dividend payouts		_	_	_			
Payouts on additional Tier 1 instruments		_	_				
Transfers to/withdrawals from profit available for distribution	_	_		_	_	_	_
Changes in group of consolidated companies	_		25	_	_		_
Capital decreases				_	_		
Other changes	_		_	_	(26)		_
Shareholders' equity as at 30/6/2024	2,407	9,791	4,297	(30)	777	(1,160)	23
Shareholders' equity as at 1/1/2023	2,407	9,791	4,652	(37)	957	(1,007)	23
Consolidated profit/(loss) recognised in the consolidated income statement	_	_	_	_	_	_	_
Total income and expenses recognised in equity through other comprehensive income ⁴	_	_	(70)	(2)	(39)	(29)	(2)
Unrealised gains/(losses) due to changes in measurement	_	_	(41)	(2)	(39)	_	_
Gains/(losses) reclassified to the income statement	_	_	_	_	_	_	_
Actuarial gains/(losses) on defined benefit plans	_	_	(29)	_	_	(29)	_
Changes from foreign currency translation							(2)
Other changes	_	_	_	_	_	_	
Total other changes in equity	_	_	_	_	(4)	(2)	
Capital increase	_	_	_	_	_	_	_
Reclassification from equity reserves to retained earnings	_	_	_	_	(4)	(2)	
Dividend payouts						_	
Payouts on additional Tier 1 instruments	_						
Transfers to/withdrawals from profit available for distribution		_	_	_	_	_	
Changes in group of consolidated companies							
Capital decreases	_	_	_	_	_	_	_
Other changes	_	_	_	_	_	_	_
Shareholders' equity as at 30/6/2023	2,407	9,791	4,582	(39)	914	(1,038)	21

¹ The Shareholders' Meeting of 25 March 2024 resolved to distribute the 2023 profit available for distribution in the amount of €1,725 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €2.15 per share.

The Shareholders' Meeting of 27 March 2023 resolved to distribute the 2022 profit available for distribution in the amount of €1,160 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €1.45 per share.

² Attributable to the shareholder UniCredit Bank GmbH (HVB).

³ UniCredit Bank GmbH (HVB).

⁴ Recognised through the statement of total comprehensive income.

_	CHANGE IN ME A OF FINAN INSTRUM	ICIAL	_		TOTAL SHAREHOLDERS' EQUITY	AD DI-		TOTAL SHARE-
€ millions	HEDGE RE-SERVE	FVTOCI RE- SERVE	PROFIT AVAILABLE FOR DISTRI- BUTION ¹	CONSO- LIDATED PROFIT 1/1-30/6 ²	ATTRIBUTABLE TO THE SHAREHOLDER OF HVB ³	TIONAL TIER 1 INSTRU- MENTS	MINORITY INTERESTS	HOLD- ERS' EQUITY
Shareholders' equity as at 1/1/2024	(2)	(8)	1,725	_	18,250	1,700	(10)	19,940
Consolidated profit/(loss) recognised in the consolidated income statement	_	_	_	1,067	1,067	_	_	1,067
Total income and expenses recognised in equity through other comprehensive	4	5	_	_	(33)	_	_	(33)
Unrealised gains/(losses) due to changes in measurement	4	9	_	_	1	_	_	1
Gains/(losses) reclassified to the income statement	_	(4)	_		(4)		_	(4)
Actuarial gains/(losses) on defined benefit plans	_	_	_	_	(35)	_	_	(35)
Changes from foreign currency translation	_		_	_	5	_	_	5
Other changes	_	_	_	_	_	_	_	_
Total other changes in equity			(1,725)		(1,700)		_	(1,700)
Capital increase	_	_	_	_	_	_	_	_
Reclassification from equity reserves to retained earnings	_	_	_	_	_	_	_	_
Dividend payouts	_		(1,725)		(1,725)			(1,725)
Payouts on additional Tier 1 instruments	_	_	_	_	_	_	_	_
Transfers to/withdrawals from profit available for distribution	_	_	_	_	_	_	_	_
Changes in group of consolidated	_	_	_	_	25	_	_	25
Capital decreases	_	_	_	_	_	_	_	_
Other changes	_	_	_	_	_	_	_	_
Shareholders' equity as at 30/6/2024	2	(3)	_	1,067	17,584	1,700	(10)	19,274
Shareholders' equity as at 1/1/2023	4	11	1,160		18,048	1,700	(9)	19,739
Consolidated profit/(loss) recognised in the consolidated income statement	-	_	_	1,021	1,021	_	_	1,021
Total income and expenses recognised in equity through other comprehensive	(1)	1	_	_	(72)	_	_	(72)
Unrealised gains/(losses) due to changes in measurement	(1)	_	_	_	(42)	_	_	(42)
Gains/(losses) reclassified to the income statement	_	1	_	_	1	_	_	1
Actuarial gains/(losses) on defined benefit plans	_	_	_	_	(29)	_	_	(29)
Changes from foreign currency translation	_	_	_	_	(2)	_	_	(2)
Other changes	_	_	_	_	_	_	_	_
Total other changes in equity	_		(1,160)		(1,160)	_	_	(1,160)
Capital increase			_			_	_	
Reclassification from equity reserves to retained earnings	_	_	_	_	_	_	_	_
Dividend payouts	_	_	(1,160)	_	(1,160)	_	_	(1,160)
Payouts on additional Tier 1 instruments			_		_	_		
Transfers to/withdrawals from profit available for distribution	_	_	_	_	_	_	_	
Changes in group of consolidated	_	_	_	_	_	_	_	
Capital decreases			_	_	_	_		_
Other changes	_	_	_	_	_	_	_	_
Shareholders' equity as at 30/6/2023	3	12	_	1,021	17,837	1,700	(9)	19,528

Consolidated Cash Flow Statement (abridged version)

€ millions	2024	2023
CASH AND CASH EQUIVALENTS AS AT 1/1	23,293	36,833
CASH FLOW FROM OPERATING ACTIVITIES	(10,821)	1,714
CASH FLOW FROM INVESTING ACTIVITIES	99	(4)
CASH FLOW FROM FINANCING ACTIVITIES	(1,730)	(1,200)
Effects of exchange rate changes	_	_
Less non-current assets or disposal groups held for sale	_	_
CASH AND CASH EQUIVALENTS AS AT 30/6	10,841	37,343

Legal Basis

Details of the company

Company name UniCredit Bank GmbH

Legal form of the company Gesellschaft mit beschraenkter Haftung (limited liability company)

Company headquarters Germany

Country in which the company is registered as a legal entity Germany

Address of the registered office and principal place of business

Arabellastrasse 12, 81925 Munich, Germany

Commercial Register Number HRB 289472, B section of the Commercial Register,

Munich Local Court

Type of business activity of the company

Conducting all kinds of banking transactions and the business of a

Pfandbrief Bank, providing financial services and performing all other

principal and ancillary activities a credit institution or Pfandbrief bank may perform, both for its own account or for the account of a third

party

Name of the parent company UniCredit S.p.A.

Name of the ultimate parent company of the corporate group UniCredit S.p.A.

https://www.unicreditgroup.eu/en/investors/financial-reports.html.

UniCredit Bank GmbH (HVB) is an affiliated company of UniCredit S.p.A., Milan, Italy in whose financial statements HVB Group is included. These are published on the UniCredit corporate group's website at:

We did not make use of the option of reviewing the present Half-yearly Financial Report of HVB Group provided for under Section 115 (5) of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG).

The current consolidated financial statements comprise UniCredit Bank GmbH and its subsidiaries (HVB Group) and are prepared in euros, which is the reporting currency of the corporate group.

Accounting and Valuation

1 Reporting date/period

The amounts shown in the tables and texts below for balance sheet items and totals relate to the reporting date and to 31 December of the previous year. Disclosures concerning the income statement relate to the period from 1 January to 30 June of the reporting year and the previous year.

2 Uniform Group accounting policies

The separate financial statements of the domestic and foreign subsidiaries are incorporated in the consolidated financial statements of HVB Group in accordance with uniform accounting and valuation principles.

3 Consistency

In accordance with the IFRS framework together with IAS 1 and IAS 8, the accounting, valuation and disclosure policies are applied consistently from one period to the next. Any changes in accounting policies are discussed, where necessary, as follows: the first-time adoption of new or amended IFRS accounting rules is described in the Note "First-time adoption of new IFRS accounting rules". Where significant accounting and valuation errors from earlier periods are corrected, the amounts involved are adjusted retroactively as a general rule. Where retroactive adjustment is not possible in exceptional circumstances, the amounts involved are adjusted against retained earnings. Where we effect changes in accounting and valuation policies, any resulting adjustments are similarly recognised retrospectively.

The present Half-yearly Financial Report of HVB Group has been prepared in accordance with the rules defined in the International Financial Reporting Standards (IFRS) and complies with IAS 34, which covers interim reporting. Thus, the present Half-yearly Financial Report meets the requirements of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG) for the half-yearly financial reporting of capital-market-oriented companies.

In addition to the amendments listed below, the accounting and valuation policies have been applied unchanged compared with the previous year. These are described in the notes to the consolidated financial statements in the 2023 Annual Report.

The models used to calculate expected credit losses generally reflect effects from the adjustment of macroeconomic factors. In addition, overlays were applied in 2022 and 2023 for certain sub-portfolios that are particularly sensitive to certain risks. These overlays are to be considered supplementary measures to the expected loss models. On the one hand, these risks are geopolitical risks caused by the sudden increase in energy costs, inflation and interest rates for both companies and private individuals. On the other hand, these are risks that have arisen especially in the commercial real estate and construction industry as a result of the persistently high level of interest rates.

In the reporting period, the method used for overlays were adjusted in terms of the planned exit from the overlays.

As regards the LGD model, there was a change in the method used in the LGD model which was adapted to conform to the regulatory model.

In addition, an updated calibration of the forward-looking macroeconomic scenarios for local corporate customers was carried out.

4 First-time adoption of new IFRS accounting rules

New standards and interpretations

No new standards and interpretations issued by the IASB were subject to mandatory adoption in the EU for the first time in the 2024 financial year.

Amendments to existing standards and interpretations

The amendments to the following standards and interpretations revised by the IASB are subject to mandatory adoption in the EU for the first time in the 2024 financial year:

- Amendments to IFRS 16 "Leases" Lease Liability in a Sale and Leaseback (issued on 22 September 2022 / adopted into European law on 20 November 2023).
- Amendments to IAS 1 "Presentation of Financial Statements" Classification of Liabilities as Current or Noncurrent (issued on 23 January 2020 / adopted into European law on 19 December 2023); Classification of Liabilities as Current or Non-current: Deferral of Effective Date (issued on 15 July 2020 / adopted into European law on 19 December 2023) and Non-current Liabilities with Covenants (published on 31 October 2022 / adopted into European law on 19 December 2023).
- Amendments to IAS 7 "Statement of Cash Flows" and IFRS 7 "Financial Instruments: Disclosures" Supplier Finance Arrangements (issued on 25 May 2023 / adopted into European law on 15 May 2024).

Implementation and effects of the amended accounting rules

HVB Group has adopted the amended accounting rules. Unless the effects of this adoption are explicitly explained below, they did not impact or have any material effects on our consolidated financial statements.

5 Published IFRS that are not yet subject to mandatory adoption and were not early adopted

HVB Group has decided against the voluntary early adoption of the new or revised standards and interpretations issued by the IASB that are subject to mandatory adoption or may be adopted from the 2025 financial year or later. HVB Group will adopt these standards and interpretations in the financial year in which the new rules in question become subject to mandatory adoption for EU-based enterprises for the first time.

The EU has adopted the following into European law:

- There are no new or revised rules issued by the IASB that are subject to mandatory adoption for the first time from the 2025 financial year or later that the EU adopted into European law.

Accounting and Valuation (CONTINUED)

The EU has not yet adopted the following into European law:

- Amendments to IAS 21 "The Effects of Changes in Foreign Exchange Rates Lack of Exchangeability (issued on 15 August 2023). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2025.
- IFRS 18 "Presentation and Disclosure in Financial Statements" (issued on 9 April 2024). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2027.
- IFRS 19 "Subsidiaries without Public Accountability: Disclosures" (issued on 9 May 2024). The rules may be adopted by eligible companies for the first time for financial years beginning on or after 1 January 2027.
- Amendments to IFRS 9 "Financial Instruments" and IFRS 7 "Financial Instruments: Disclosures" Amendments
 to the Classification and Measurement of Financial Instruments (issued on 30 May 2024). The rules are subject
 to mandatory adoption for the first time for financial years beginning on or after 1 January 2026.
- Annual Improvements to IFRS (Volume 11) with minor amendments to IFRS 1 "First-time Adoption of IFRS", IFRS 7 "Financial Instruments: Disclosures" including the associated implementation guidance, IFRS 9 "Financial Instruments", IFRS 10 "Consolidated Financial Statements" and IAS 7 "Statement of Cash Flows" (issued on 18 July 2024). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2026.

HVB Group does not expect these new or amended rules to be adopted in the future to have any significant effects on the consolidated financial statements.

6 Companies included in consolidation

The following companies left the group of companies included in consolidation in the first half of 2024 due to merger or sale:

- NF Objekt FFM GmbH, Munich
- Structured Invest Société Anonyme, Luxembourg

The following companies left the group of companies included in consolidation in the first half of 2024 for reasons of materiality:

- BARD Engineering GmbH, Emden
- BARD Holding GmbH, Emden

The deconsolidation of these companies does not have any material impact. The share of these companies in the total assets of the Group stood at 0.025% as at 31 December 2023.

Segment Reporting

7 Changes in segment reporting

In the first half of 2024, HVB Group made the following adjustment to the segmented income statement: The income component customer margin was reclassified to fees for further products. This was originally allocated to trading profit. This reclassification is now applied for all those products where the customer margin can be fixed through suitable hedging transactions. In addition to the adjustment made in the previous year, this definition now also includes equity derivatives, FX options and a part of the commodity derivatives (known as prepaid forward carbon trades).

This adjustment was also made for the disclosure of the previous-year figures to ensure comparability between periods. No other significant methodical adjustments were made. The division into HVB Group's operating segments remained unchanged. In segment reporting, the activities of HVB Group continue to be divided into the following operating segments:

- Retail
- Corporates
- Other

Disclosures in segment reporting are based on HVB's internal management. Therefore, income and expenses that are not solely based on external business activities but serve internal management purposes and represent internal allocations and the like may be recognised here. Where such internal income/expenses between the respective segments are recognised in identical items of the segmented income statement, these allocations are netted across all the segments. Any remaining effects from internal allocations are eliminated during consolidation so that only external income/expenses remain as a result in the total segmented income/expenses across all the segments, including consolidation.

Differences between the segmented income statement and the income statement are addressed in the reconciliation. The adjustment already made in the previous year and the change in disclosure in the first half of 2024 relates to the circumstances described above: As the sales margin was only reclassified to net fees and commissions in the segmented income statement for internal management purposes, while net trading income is disclosed unchanged in the income statement, this has resulted in a reconciliation difference of €151 million for the first half of 2024 (previous-year period: €170 million).

Due to rounding, minor deviations can occur when calculating totals and percentages.

8 Method of segment reporting by operating segment

In segment reporting, the activities of HVB Group are divided into the following operating segments:

- Retail
- Corporates
- Other

Segment reporting is based on the internal organisational and management structure together with internal financial reporting which reflect the perspective of the UniCredit corporate group and thus do not take factors into account that are not relevant for the UniCredit corporate group. In accordance with IFRS 8 Operating Segments, segment reporting thus follows the Management Approach, which requires segment information to be presented externally in the same way as it is reported on a regular basis to the Executive Board, as the responsible management body, and is used for the allocation of resources (such as risk-weighted assets compliant with CRR II) to the operating segments and for assessing profitability. In this context, the profit or loss after tax serves as the relevant result. Segment data are generally determined in accordance with IFRS and adjusted for the factors set out below. Due to rounding, minor deviations can occur when calculating totals and percentages.

In segment reporting, the operating segments operate as autonomous companies with their own equity resources and responsibility for profits and losses. The operating segments are divided according to their responsibility for serving customers. For a description of the customer groups assigned to the individual operating segments and the main components of the segments, please refer to the Note "Components of segment reporting by operating segment".

The income statement items "Net fees and commissions", "Net trading income" and "Net other expenses/income" shown in the operating segments are based almost exclusively on transactions involving external customers. Net interest is assigned to the operating segments in accordance with the market interest calculation method on the basis of the external interest income and interest expense. For this reason, a separate presentation broken down by external/internal revenues (operating income) has not been included.

The equity capital allocation used to calculate the return on investment for companies assigned to several operating segments is based on a uniform core capital allocation for each operating segment. Pursuant to CRR II, this involves allocating 13.0% (previous year: 13.0%) of core capital in relation to risk-weighted assets to the operating segments. The average tied core capital calculated in this way is used to compute the return on investment, which is disclosed under net interest. The percentage used for the return on the equity capital allocated to the companies of HVB Group equals the base rate according to the book of own funds. In addition, a premium for credit risk is charged in the amount of the average spread curve for the medium- and long-term lending business of HVB Group. This rate is set for one year in advance as part of each budgeting process. Equity capital is not standardised for the other companies included in the consolidated financial statements.

Operating costs, which include payroll costs, other administrative expenses as well as amortisation, depreciation and impairment losses on intangible and tangible assets, are allocated to the operating segments according to causation. The Digital & Operations and Corporate Center areas are treated as external service providers, charging the remaining operating segments and business units for their services at a price which covers their costs. The method of calculating the costs of general banking services involves employing a weighted allocation key (costs, income, FTEs, base amount) for each operating segment to determine the assigned costs that cannot be allocated directly. The majority of the depreciation and impairment losses taken on property, plant and equipment are posted for the real estate companies of HVB Group included in the Other business area.

The profit of €1 million (previous year: €1 million) from investments in associates relates to Comtrade Group S.à.r.l., Luxembourg, a company accounted for using the equity method. The profit is disclosed under the item "Dividends and other income from equity investments" in the income statement. In the reporting year, a writedown of €1 million (previous year: write-up of €2 million) was made on the carrying amount of the company accounted for using the equity method, which is reported under net income from investments. The carrying amount of the company accounted for using the equity method totals €17 million (previous year: €17 million).

9 Components of segment reporting by operating segment

Retail operating segment

The Retail operating segment is subdivided into the Retail and Private business areas. The Retail business area serves retail customers as well as small business customers requiring simple, standardised products and advice in all areas of demand. The Private business area serves wealth management and private banking customers.

The retail customer business provides universal banking services across all sales channels (branch, remote and digital) for discerning customers. The high standard of quality of the extensive and needs-based advisory services is supported by HVB's financial concept. This comprehensive advisory approach is supplemented by the smart banking service model for customers requiring standardised products and services. In the wealth management & private banking relationship model, very high net worth clients are served by advisors and a network of highly qualified specialists based on a 360-degree advisory approach with the aim of achieving a sustainable increase in the prosperity of our customers and thus maintaining long-term, trusting customer relationships.

In the area of small business customers, we offer our customers a full range of services in corporate and private financial and asset issues with customers benefiting even more than before from the modernisation and expansion of our digital offering already embarked upon. In addition, our offerings for special target groups, such as healthcare professionals, are being developed on an ongoing basis.

In line with the universal bank model, the range of products and services of the Retail operating segment enables us to provide comprehensive customer support. In the Retail business area, this extends from payment services, investment products, mortgage loans, consumer loans, savings-and-loan and insurance products and banking services for retail customers through to short- and long-term business loans for small business customers. In the Private business area, customised portfolio concepts, financing solutions as well as the brokerage of corporate investments are also offered to high net worth private customers with an entrepreneurial background.

Corporates operating segment

The Corporates operating segment bundles the corporate banking business. In this context, we position ourselves as a strategic partner with complete and customised solutions for corporate customers. This segment covers the SME and Large Corporates business areas and serves the entire spectrum of small and medium-sized through to large companies.

In the SME business area, we maintain regional presence in the market. In doing so, we use differentiated relationship models to target our corporate customers depending on the needs of each customer. This enables resources to be distributed in line with heterogeneous market conditions and thus the earnings potential to be effectively exploited in each region.

Regional relationship management covers tailored financing offers, for example through the use of subsidies as well as solutions for the management of financial risks, in addition to the traditional banking services of payments and lending. Furthermore, the services provided for special target groups are being continuously refined and special advisory services, like in the Capital Markets and M&A business area, are offered for relevant customer groups.

The Large Corporates business area covers large corporate customers requiring highly complex services who are managed in the Industry Coverage area. The quality of service in this area lies in exploiting our strengths consisting of a wide range of products, in-depth sector know-how and the creation of customised customer solutions in our customer relationships whilst assuming a leading core bank role. Our range of products and services also includes traditional banking products and the entire product portfolio of Client Solutions, UniCredit's global product factory. It is rounded off by our own ESG products as well as external insurance products.

Furthermore, the customer relationship management of Financial Institutions (FI), the proprietary Private Investor Products business (PIP) as well as activities in our international network are shown within the Large Corporates business area.

In the business with Financial Institutions, selected FI customers are provided with the entire UniCredit platform simply and efficiently and served in dedicated teams for banks, insurances, fund managers and public institutions. In PIP, we offer private investors risk management solutions and investment products through our own or third-party networks. As a rule, the complete range of the Bank's products is available to corporate customers and to financial institutions at HVB's foreign branches.

In detail, the range of products and services of Corporates includes the following products of Client Solutions:

- Advisory & Financing Solutions (A&FS) bundles the business involving advisory services into transactions, capital structure, ESG and rating as well as financing solutions, among other things. Depending on the rating (investment grade / non-investment grade) and business requirements, structured solutions with loans, bonds or asset-based finance can be offered.
- Trading & Correspondent Banking offers a broad array of innovative products in the areas of trade finance and working capital, thus meeting customer needs in connection with transactions in the areas of the optimisation of cash flows and operating resources as well as mainly short-term import and export financing services.

- Client Risk Management is a customer-oriented product area that supports business with UniCredit's corporate and institutional customers as an integral part of the value chain. This product area extends over all asset classes: interest, currencies, commodities and equity derivatives. It offers institutional customers, corporate customers and private investors risk management solutions and investment products through the Group's own or third-party networks.
- Group Payment Solutions offers a wide range of innovative products in the area of cash management, thus meeting customer needs in connection with transactions in the areas of payment services, account information and liquidity management.

Other business area

The Other business area (Central Functions) combines the remaining areas not directly relating to customers: Digital & Operations (CDOO) – after the merger of Operations Germany (COO) and Digital & Information (CDIO) as of 1 January 2024, Corporate Center and Treasury. Furthermore, payments recognised through profit or loss between the individual companies belonging to and consolidated within HVB Group, whose amounts are of minor importance, are also reported under this area.

CDOO manages HVB's entire digital and operational transformation and supports the Bank in achieving its business and corporate goals vis-à-vis customers, employees and stakeholders.

The new structure of CDOO is based on product and process value chains and cross-departmental functions that focus on synergies and optimisations when providing products and services across customer segments. Responsibilities for processes, services, IT applications (from a business perspective) and banking operations as well as for external service providers are bundled vertically along the product value chains. CDOO works jointly with business areas on their respective product strategies.

Product and process value chains cover general banking operations (for example, accounts, customer master data, know your customer (KYC) and payments), lending and finance solutions as well as capital market and investment products, insurance solutions and the respective retained organisation functions for outsourced services (for example, payments and securities settlement). This is supported by a comprehensive strategy aimed at optimising customer service through the seamless integration of digital and physical channels.

Cross-departmental functions create further added value and optimise the provision of products in line with UniCredit's priorities. These include the centre of competence for data and analysis, which is responsible for promoting the data strategy and data products in coordination with the Group, the security function, which protects HVB's customers, employees, information and assets against a series of threats, including cyber, physical and fraud threats, and the Bank's property management.

Further focal points are supporting the Bank's transformation processes, ensuring a robust governance structure, cost management, outsourcing and third-party management as well as process management. In addition, CDOO acts as the central management unit for ICT investments and is responsible for HVB's ICT compliance. IT application development and IT operations have been outsourced to the parent company and are managed in CDOO through the respective retained organisation.

The Corporate Center includes the Finance (Chief Financial Officer), CRO (Chief Risk Office) and CEO (Chief Executive Office), People & Culture business areas as well as other banking activities, consolidated subsidiaries and non-consolidated holdings that are not assigned to any other business area. Furthermore, the Corporate Center incorporates the net income from securities portfolios for which the Executive Board is responsible. It also contains components of profit or loss from decisions taken by the Executive Board with regard to asset/liability management. In addition, the Corporate Center incorporates the Real Estate Restructuring customer portfolio.

Treasury, in particular its Medium Long Term (MLT) area, is responsible for funding, interest rate management and cash pooling in the medium- and long-term interest book, while Short Term Funding & IR Management is responsible for liquidity, interest and KPI management over the short term and for collateral trading. The main components of income come from securities portfolios where income is generated through maturity transformation and spread components. Further earnings drivers are short-term interest rate and liquidity management where spreads contribute to profits. Collateral Trading generates both interest and commission income.

Information on products and services at company level

The information required by IFRS 8.32 on income from external customers generated from the products and services of HVB Group is contained in the disclosures regarding the income statement in these notes to the consolidated financial statements.

10 Income statement, broken down by operating segment Income statement, broken down by operating segment for the period from 1 January to 30 June 2024

INCOME/EXPENSES (€ millions)	RETAIL	CORPORATES	OTHER	HVB GROUP
Net interest	514	606	126	1,246
Dividends and other income from equity investments	_	1	_	1
Net fees and commissions	298	569	(21)	847
Net trading income	6	688	39	733
Net other expenses/income	11	2	26	39
OPERATING INCOME	829	1,866	171	2,866
Payroll costs	(174)	(236)	(202)	(612)
Other administrative expenses	(271)	(398)	194	(475)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(3)	(4)	(29)	(36)
Operating costs	(448)	(638)	(37)	(1,123)
OPERATING PROFIT/(LOSS)	381	1,228	134	1,743
Net write-downs of loans and provisions for guarantees and commitments	(5)	(132)	2	(135)
NET OPERATING PROFIT/(LOSS)	376	1,097	136	1,608
Provisions for risks and charges	(8)	3	(2)	(6)
Restructuring costs	(7)	(6)	_	(12)
Net income from investments	(5)	(2)	(14)	(22)
PROFIT/(LOSS) BEFORE TAX	356	1,092	120	1,568
Income tax for the period	(111)	(356)	(37)	(505)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	245	735	82	1,063
attributable to the shareholder of UniCredit Bank GmbH	245	735	82	1,063
attributable to minorities	_	_	_	_

Reconciliation of the segmented income statement to the income statement from 1 January to 30 June 2024

INCOME/EXPENSES (€ millions)	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSI- FICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Net interest	1,246	25		1,271
Reallocation of net interest from specific held-for-trading portfolios	.,	47		.,
Compounding of provisions and of provisions for contingent liabilities		(22)		
Effect of derecognition of TLTRO III		(22)		
Interest expense for pension provisions				
Dividends and other income from equity investments	1	26		27
Dividends from assets mandatorily at FVTPL	<u>'</u>	26		21
Net fees and commissions	847	(185)	8	670
Expense for purchased securities services for held-for-trading portfolios	047	20		070
Share of commission from the placement of securities and derivatives		(54)		
Imputed sales margin for derivatives and FX spot transactions		(151)		
Retrospective intragroup sale of Structured Invest Société Anonyme	700		8	044
Net trading income	733	207		941
Financial assets mandatorily at FVTPL		31		
Financial liabilities designated at FVTPL		(71)		
Net gains/(losses) on the sale of securities (held-for-sale business model)		(6)		
Hedge accounting effects		150		
Fair value measurement of equity instruments		(26)		
Buy-backs of securities issued – recognised at cost				
Net gains/(losses) on the sale of performing securities (hold-to-maturity business model)		(3)	_	
Dividends from assets mandatorily at FVTPL		(26)	_	
Reallocation of net interest from specific held-for-trading portfolios		(47)		
Share of commission from the placement of securities and derivatives		54		
Net gains/(losses) on the sale of non-performing securities (hold-to-maturity business model)		_	_	
Imputed sales margin for derivatives and FX spot transactions		151		
Net gains/(losses) on financial assets and liabilities at fair value	n/a	(78)	_	(78)
Financial assets mandatorily at FVTPL		(31)	_	
Financial liabilities designated at FVTPL		71	_	
Net gains/(losses) on the sale of securities (held-for-sale business model)		6	_	
Hedge accounting effects		(150)	_	
Fair value measurement of equity instruments		26	_	
Net gains/(losses) on non-consolidated subsidiaries mandatorily at FVTPL		_	_	
Net gains/(losses) on derecognition of financial instruments measured at cost	n/a	(1)	_	(1)
Net gains/(losses) on the sale of performing loans and receivables, and securities (hold-to-maturity business model)		(1)	_	
Effect of derecognition of TLTRO III				
Buy-backs of securities issued – recognised at cost				
Net other expenses/income	39	(10)	7	37
Net gains/(losses) on the sale of performing loans and receivables (hold-to-maturity business model) Net gains/(losses) on the valuation/disposal of investment properties and		(10)	_	
operating leases		(10)	_	
Net gains/(losses) on the valuation of inventories		(4)		
European bank levy			_	
Adjustment of managerial scope of consolidation			7	
Other effects				
OPERATING INCOME	2,866	(16)	15	2,867
Payroll costs	(612)	1	(1)	(612)

INCOME/EXPENSES (€ millions)	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSI- FICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Adjustment of managerial scope of consolidation	SEGWENT	FICATION	DIFFERENCES	STATEMENT
Retrospective intragroup sale of Structured Invest Société Anonyme			(1)	
Interest expense for pension provisions Compounding of provisions				
	(475)		(9)	(525)
Other administrative expenses	(475)	(41)	(8)	(525)
Adjustment of managerial scope of consolidation			(7)	
Retrospective intragroup sale of Structured Invest Société Anonyme		(00)	(1)	
Deposit guarantee scheme		(23)		
Compounding of provisions		2		
Expense for purchased securities services for held-for-trading portfolios		(20)		
Depreciation on leasehold improvements in buildings		2		
Other effects		(2)		
Amortisation, depreciation and impairment losses on intangible and tangible assets	(36)	(8)		(44)
Depreciation on leasehold improvements in buildings		(2)		
Net write-ups and write-downs on land and buildings	(1.122)	(6)		
Operating costs	(1,123)	(48)	(9)	(1,181)
OPERATING PROFIT/(LOSS)	1,743	(64)	6	1,686
Net write-downs of loans and provisions for guarantees and commitments	(135)	3		(132)
Impairments/writebacks of securities at cost and at FVTOCI				
Net gains/(losses) on the sale of non-performing securities (hold-to-maturity business model)			_	
Compounding of provisions for contingent liabilities		1		
Valuation allowances relating to group-affiliated companies in Russia				
Other effects		2		
NET OPERATING PROFIT/(LOSS)	1,608	(61)	6	1,554
Provisions for risks and charges	(6)	27		20
European bank levy and deposit guarantee scheme		23		
Compounding of provisions		4		
Irrevocable payment commitments provided for bank levy and deposit guarantee scheme recognised as an expense				
Restructuring costs	(12)	14		2
Compounding of provisions		14		
Net income from investments	(22)	22	_	n/a
Impairments/writebacks of securities at cost and at FVTOCI				
Net gains/(losses) on the valuation/disposal of investment properties and operating leases		10		
Net gains/(losses) on the valuation of inventories		4		
Net gains/(losses) on remeasurement of consolidated companies		2	_	
Net gains/(losses) on non-consolidated subsidiaries mandatorily at FVTPL				
Unscheduled write-ups and write-downs on land and buildings		6	<u> </u>	
Net gains/(losses) on remeasurement of consolidated companies	n/a	(2)		(2)
PROFIT/(LOSS) BEFORE TAX	1,568		6	1,574
Income tax for the period	(505)	_	(1)	(507)
Tax on valuation allowances relating to group-affiliated companies in Russia				
Retrospective intragroup sale of Structured Invest Société Anonyme		_	(1)	
Differences arising from the adjustment of the estimated deferred taxes between UniCredit and HVB		_	_	
Other effects			_	
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	1,063	_	5	1,067
attributable to the shareholder of UniCredit Bank GmbH	1,063	_	5	1,067
attributable to minorities				_

Income statement, broken down by operating segment for the period from 1 January to 30 June 2023

INCOME/EXPENSES (€ millions)	RETAIL	CORPORATES	OTHER	HVB GROUP
Net interest	538	734	113	1,385
Dividends and other income from equity investments	_	1	_	1
Net fees and commissions	279	575	(2)	852
Net trading income	2	603	33	638
Net other expenses/income	8	2	6	16
OPERATING INCOME	828	1,915	150	2,892
Payroll costs	(180)	(256)	(232)	(669)
Other administrative expenses	(289)	(417)	221	(484)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(2)	(7)	(39)	(49)
Operating costs	(471)	(680)	(50)	(1,201)
OPERATING PROFIT/(LOSS)	357	1,234	100	1,691
Net write-downs of loans and provisions for guarantees and commitments	(42)	(18)	3	(58)
NET OPERATING PROFIT/(LOSS)	314	1,216	102	1,633
Provisions for risks and charges	(15)	(195)	(6)	(216)
Restructuring costs	(17)	(27)	(15)	(59)
Net income from investments	(11)	3	(17)	(24)
PROFIT/(LOSS) BEFORE TAX	272	998	64	1,334
Income tax for the period	(73)	(262)	16	(318)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	199	736	80	1,015
attributable to the shareholder of UniCredit Bank GmbH	199	736	80	1,015
attributable to minorities	_	_	_	_

Development of the Retail operating segment

INCOME/EXPENSES (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Net interest	514	538
Dividends and other income from equity investments	_	_
Net fees and commissions	298	279
Net trading income	6	2
Net other expenses/income	11	8
OPERATING INCOME	829	828
Payroll costs	(174)	(180)
Other administrative expenses	(271)	(289)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(3)	(2)
Operating costs	(448)	(471)
OPERATING PROFIT/(LOSS)	381	357
Net write-downs of loans and provisions for guarantees and commitments	(5)	(42)
NET OPERATING PROFIT/(LOSS)	376	314
Provisions for risks and charges	(8)	(15)
Restructuring costs	(7)	(17)
Net income from investments	(5)	(11)
PROFIT/(LOSS) BEFORE TAX	356	272
Income tax for the period	(111)	(73)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	245	199
attributable to the shareholder of UniCredit Bank GmbH	245	199
attributable to minorities	_	_
Cost-income ratio in % (ratio of operating costs to operating income)	54.0	56.9

In the first half of 2024, the Retail operating segment generated operating profit (before net write-downs of loans and provisions for guarantees and commitments) of €381 million and is thus a moderate €24 million (up 6.7%) higher than in the previous-year period.

At €829 million, operating income was virtually unchanged at the previous year's level of €828 million. Net interest contained within operating income totalled €514 million, which is a moderate €24 million lower (down 4.4%) than the amount of €538 million recognised in the previous-year period. Despite a challenging environment, the net interest generated in lending activities totalled €165 million and thus remained virtually unchanged at the previous year's level of €163 million. By contrast, there was a moderate decline from €339 million to €322 million in the net interest from deposit-taking operations against the backdrop of the changing market environment.

Compared with the previous-year period, net fees and commissions were up moderately by €19 million to €298 million. This increase was due to a noticeable rise in income from the securities business (up 7.8%), a significant increase in the insurance business (up 15.0%) and a moderate rise in income from payments (up 5.8%).

There was a significant increase of €4 million to €6 million in net trading income.

Net other expenses/income reports income of €11 million for the reporting period and has thus increased a significant €3 million compared with the previous-year period.

Compared with the previous-year period, operating costs fell by €23 million (down 4.9%) to €448 million in the reporting period. This is due to lower payroll costs that decreased by €6 million (down 3.4%) to €174 million compared with the previous-year period and to other administrative expenses that declined by €18 million (down 6.2%) to €271 million compared with the previous-year period on the back of lower expenses for charged back-office activities.

The cost-income ratio improved to 54.0% in the reporting period compared with 56.9% in the previous-year period.

The item "Net write-downs of loans and provisions for guarantees and commitments" shows a net addition of €5 million in the reporting period compared with a net addition of €42 million in the previous-year period. In the reporting period, additions to specific loan loss allowances were partly offset by net reversals of general loan loss allowances on the loan portfolio.

At €376 million, net operating profit was a significant €62 million higher than the profit of €314 million generated in the previous-year period.

There was a net expense of €8 million from provisions for risks and charges in the reporting period compared with €15 million in the previous-year period.

In the reporting year, restructuring costs were down by €10 million from a net addition of €17 million in the previous-year period to €7 million in the reporting period. The decline is attributable to expenses for adjustments made to existing IT activities/other service areas.

Net income from investments reports a negative result of €5 million in the reporting period (previous-year period: a negative result of €11 million.

Overall, the Retail operating segment generated profit before tax of €356 million in the reporting period, which is significantly higher than the profit of €272 million generated in the previous-year period. The decrease in operating costs, significant declines in net write-downs for loans and provisions for guarantees and commitments, in expenses for provisions and in restructuring costs coupled with the significantly better net income from investments contributed to this improvement in profit before tax.

In the reporting period, the expense incurred for income tax for the period comes to €111 million, which reflects a significant increase on the expense of €73 million recognised in the previous-year period. This is attributable to the significant increase in profit before tax.

The Retail operating segment reports a profit after tax of €245 million for the first half of 2024, which is significantly higher than the comparative figure of €199 million reported in the previous-year period. At 31.7%, the RoAC is noticeably higher than the respective figure of 24.4% reported in the previous-year period.

Development of the Corporates operating segment

INCOME/EXPENSES (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Net interest	606	734
Dividends and other income from equity investments	1	1
Net fees and commissions	569	575
Net trading income	688	603
Net other expenses/income	2	2
OPERATING INCOME	1,866	1,915
Payroll costs	(236)	(256)
Other administrative expenses	(398)	(417)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(4)	(7)
Operating costs	(638)	(680)
OPERATING PROFIT/(LOSS)	1,228	1,234
Net write-downs of loans and provisions for guarantees and commitments	(132)	(18)
NET OPERATING PROFIT/(LOSS)	1,097	1,216
Provisions for risks and charges	3	(195)
Restructuring costs	(6)	(27)
Net income from investments	(2)	3
PROFIT/(LOSS) BEFORE TAX	1,092	998
Income tax for the period	(356)	(262)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	735	736
attributable to the shareholder of UniCredit Bank GmbH	735	736
attributable to minorities	_	_
Cost-income ratio in % (ratio of operating costs to operating income)	34.2	35.6

In the first half of 2024, the Corporates operating segment generated operating profit (before net write-downs of loans and provisions for guarantees and commitments) of €1,228 million which, declining by €6 million (down 0.5%), thus remained virtually unchanged compared with the previous-year period.

At €1,866 million, operating income was a moderate €49 million lower (down 2.6%) than the previous year's level of €1,915 million. Net interest contained within operating income declined significantly by €128 million to €606 million compared with the previous-year period. This decline was driven primarily by the negative impact of higher market interest rates on refinancing trading activities (positive counter-effect is reflected in net trading income).

The item "Dividends and other income from equity investments" totalled €1 million and is thus unchanged compared with the previous-year period.

Down by €6 million (1.0%), net fees and commissions remained virtually unchanged in the reporting period and total €569 million (previous-year period: €575 million). This development is based on lower income from commodity derivates, which was almost completely offset by higher income from payments as well as the lending and capital market business.

There was a noticeable rise of €85 million to €688 million in net trading income compared with the previous-year period. This was mainly due to income from strong business in the equity products trading area and in the capital market trading area. The significant rise seen in market interest rates (the counter-effect is reflected in net interest) also contributed to the higher net trading income.

Net other expenses/income reports a result of €2 million, which thus remained unchanged compared with the figure of €2 million reported in the previous-year period.

At €638 million in the reporting period, operating costs declined by €42 million (down 6.2%) compared with the €680 million recorded for the previous-year period. There was a noticeable decline of €20 million (down 7.8%) to €236 million in payroll costs, which fell as a result of the reduction in staffing levels. At €398 million, other administrative expenses decreased by €19 million (down 4.6%) compared with €417 million in the previous-year period, mainly due to lower expenses for charged back-office activities. At €4 million, depreciation and amortisation declined significantly by €3 million (down 42.9%) compared with the previous-year period.

Due to the decline in costs, the cost-income ratio improved to 34.2% in the first half of 2024 after 35.6% in the previous-year period.

With a net addition of €132 million, net write-downs of loans and provisions for guarantees and commitments deteriorated by €114 million compared with the net addition of €18 million in 2023. High additions to specific loan loss allowances had a negative impact on net write-downs of loans and provisions for guarantees and commitments in the reporting period.

Net operating profit/loss recognised in the first half of 2024 reports a profit of €1,097 million, which is noticeably lower by €119 million than the profit of €1,216 million reported in the previous-year period.

There were net reversals of provisions for risks and charges of €3 million in the reporting period after additions of €195 million in the previous-year period. This decline is largely due to the elimination of payments to the SRF (European bank levy) in 2024.

Restructuring costs fell significantly by €21 million from €27 million in the previous-year period to €6 million in the reporting period.

Net income from investments reports a negative result of €2 million in the reporting period (previous year: positive result of €3 million).

Overall, the Corporates operating segment generated profit before tax of €1,092 million in the first half of 2024, which is thus noticeably higher than the previous year's profit of €998 million. The reasons for this were lower costs and the significantly lower amounts for provisions. As a result, the decline in income and the significant rise in net write-downs for loans and provisions for guarantees and commitments were more than compensated for.

At €356 million, the expense for income tax for the period amounted to €356 million in the reporting period and – due to the higher profit before tax – is significantly higher than the expense of €262 million reported in the previous-year period.

The Corporates operating segment reports profit after tax of €735 million for the first half of 2024, which is virtually unchanged compared with the profit of €736 million recognised in the previous-year period. At 19.4%, the RoAC is noticeably higher than the respective figure of 17.3% in the previous-year period.

Development of the Other operating segment

INCOME/EXPENSES (€ millions)	1/1-30/6/2024	1/1-30/6/2023
Net interest	126	113
Dividends and other income from equity investments	_	_
Net fees and commissions	(21)	(2)
Net trading income	39	33
Net other expenses/income	26	6
OPERATING INCOME	171	150
Payroll costs	(202)	(232)
Other administrative expenses	194	221
Amortisation, depreciation and impairment losses on intangible and tangible assets	(29)	(39)
Operating costs	(37)	(50)
OPERATING PROFIT/(LOSS)	134	100
Net write-downs of loans and provisions for guarantees and commitments	2	3
NET OPERATING PROFIT/(LOSS)	136	102
Provisions for risks and charges	(2)	(6)
Restructuring costs	_	(15)
Net income from investments	(14)	(17)
PROFIT/(LOSS) BEFORE TAX	120	64
Income tax for the period	(37)	16
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	82	80
attributable to the shareholder of UniCredit Bank GmbH	82	80
attributable to minorities	_	_
Cost-income ratio in % (ratio of operating costs to operating income)	21.6	33.3

In the first half of 2024, the Other operating segment generated operating profit (before net write-downs of loans and provisions for guarantees and commitments) of €134 million and is thus a significant €34 million (34%) higher than in the previous-year period.

At €171 million, operating income was a noticeably higher by €21 million compared with the previous year's level of €150 million. Net interest in the amount of €126 million in the reporting period rose noticeably by €13 million compared with €113 million in the previous-year period. This rise is largely driven by the positive development of €37 million in the Bank's asset/liability management, which was offset by the decline of €24 million in the Treasury area.

At €39 million, net trading income rose by €6 million compared with the previous-year period. This rise is mainly due to the positive development of €9 million in the Bank's Treasury area.

Net other expenses/income come to €26 million after €6 million in the previous-year period.

At €37 million, operating costs are significantly lower by €13 million compared with the €50 million in the previousyear period. This is primarily due to lower payroll costs, which fell by €30 million from €232 million in the previousyear period to €202 million in the reporting period.

In the reporting period, there was a significant improvement to 21.6% in the cost-income ratio after 33.3% in the previous-year period.

The item "Net write-downs of loans and provisions for guarantees and commitments" reports a net reversal of €2 million compared with a net reversal of €3 million in the previous-year period.

In the reporting period, net operating profit totals €136 million, which is a significant €34 million increase on the figure of €102 million reported in the previous-year period.

In the reporting period, there was a net expense of €2 million for provisions for risks and charges after a net expense of €6 million in the previous-year period.

Restructuring costs total €0 million in the reporting period compared with restructuring costs of €15 million in the previous-year period.

Net income from investments posts a negative balance of €14 million in the reporting period (previous-year period: negative balance of €17 million).

Overall, the Other operating segment reported a profit before tax of €120 million in the reporting period and was thus significantly higher than the profit of €64 million recorded in the previous-year period. The reasons for this are the significant increase in operating income and the significant decline in operating costs.

In the reporting period, an expense of €37 million was incurred for income tax for the period compared with income of €16 million in the previous-year period.

The Other operating segment reports profit after tax of €82 million for the reporting period, which is moderately higher than the comparative figure of €80 million in the previous-year period. At 17.8%, the RoAC is lower than the respective figure of 22.4% in the previous-year period.

11 Balance sheet figures, broken down by operating segment

€ millions	RETAIL	CORPORATES	OTHER	HVB GROUP
Loans and receivables with customers (at cost) ¹				
30/6/2024	36,495	89,803	3,045	129,342
31/12/2023	36,990	87,601	1,556	126,147
Deposits from customers				
30/6/2024	62,120	59,823	14,639	136,582
31/12/2023	66,375	64,100	8,807	139,283
Risk-weighted assets compliant with Basel III (including equivalents for market risk and operational risk)				
30/6/2024	11,095	53,975	2,501	67,571
31/12/2023	11,383	55,192	2,899	69,473

^{1 &}quot;Loans and receivables with customers (at cost)" do not contain any securities holdings for internal management purposes.

Notes to the Income Statement

12 Net interest

€ millions	1/1-30/6/2024	1/1-30/6/2023
Interest income	4,549	4,025
from financial assets at cost	3,799	3,250
from financial assets at FVTOCI	125	53
from financial assets at FVTPL and hedging derivatives	223	222
from financial assets held for trading	380	476
other interest income	22	24
Negative interest on financial assets	(2)	(3)
Interest expense	(3,277)	(2,620)
from financial liabilities at cost	(2,289)	(1,695)
of which from lease liabilities	(1)	(4)
from financial liabilities at FVTPL and hedging derivatives	(545)	(431)
from financial liabilities held for trading	(408)	(472)
other interest expense	(35)	(22)
Negative interest on financial liabilities	1	3
Net interest	1,271	1,405

The reduction in net interest is primarily due to the rise in refinancing costs for trading activities within the Corporates operating segment. A positive counter-effect can be seen in net trading income.

In the reporting period, other interest expense includes effects from the compounding of interest on provisions totalling €21 million (previous-year period: €25 million).

Net interest attributable to related parties

The item "Net interest" includes the following amounts attributable to related parties:

€ millions	1/1-30/6/2024	1/1-30/6/2023
Non-consolidated affiliates	(94)	(68)
of which:		
UniCredit S.p.A.	(101)	(79)
sister companies	7	11
subsidiaries	_	_
Joint ventures	_	_
Associates	1	_
Other investees	4	3
Total	(89)	(65)

13 Dividends and other income from equity investments

€ millions	1/1-30/6/2024	1/1-30/6/2023
Dividends and other similar income	26	23
Companies accounted for using the equity method	1	1
Total	27	24

14 Net fees and commissions

€ millions	1/1-30/6/2024	1/1-30/6/2023
Fee and commission income	871	847
Securities services for customers	421	414
Payment transactions	161	160
Lending business	124	112
Guarantees	81	75
Distribution of third-party products	58	55
Other commission income	26	31
Fee and commission expense	(201)	(200)
Securities services for customers	(123)	(124)
Payment transactions	(38)	(39)
Lending business	(4)	(5)
Guarantees	(6)	(5)
Distribution of third-party products	_	_
Other commission expense	(30)	(27)
Net fees and commissions	670	647

Net fees and commissions from related parties
The item "Net fees and commissions" includes the following amounts attributable to related parties:

€ millions	1/1-30/6/2024	1/1-30/6/2023
Non-consolidated affiliates	(17)	(35)
of which:		
UniCredit S.p.A.	(14)	(26)
sister companies	(3)	(9)
subsidiaries	_	_
Joint ventures	_	_
Associates	_	_
Other investees	_	_
Total	(17)	(35)

Notes to the Income Statement (CONTINUED)

15 Net trading income

Net trading income totals €941 million in the reporting period (previous-year period: €769 million).

In particular, increasing income from business in the area of equity products had an effect here. Furthermore, a rising, high level of market interest rates is leading to further trading income with a corresponding countereffect seen in net interest.

Net trading income includes valuation discounts in the context of the fair value measurement of derivatives, particularly credit value adjustments and funding value adjustments. The reduction in valuation discounts in connection with the fair value measurement had a positive impact and resulted in income of €18 million. In the previous-year period, this income totalled €43 million.

16 Net gains/losses on financial assets and liabilities at fair value

€ millions	1/1-30/6/2024	1/1-30/6/2023
Financial assets mandatorily at FVTPL	(31)	(11)
Financial liabilities designated at FVTPL	71	(9)
Derecognition from other comprehensive income	6	_
Hedge accounting effects	(150)	32
Fair value equity	26	17
Total	(78)	29

€ millions	1/1-30/6/2024	1/1-30/6/2023
Fair value hedges	(150)	32
Changes in fair value of hedged items	38	(359)
Portfolio fair value hedges	144	(426)
Micro fair value hedges	(106)	67
Changes in fair value of hedging instruments	(188)	391
Portfolio fair value hedges	(220)	462
Micro fair value hedges	32	(71)
Cash flow hedges	_	_
Net gains/(losses) on cash flow hedges (only ineffective part)		_
Total	(150)	32

The hedge accounting effects of the main hedge accounting approaches of HVB Group are shown below:

Hedge effectiveness is measured prospectively based on sensitivity as well as retrospectively using dollar offset or regression analysis. Sources of ineffectiveness are management within a range of 80%/125%, lack of a 1:1 ratio between the hedged item and the hedging transaction as well as discounting differences between the hedged item and hedging transactions.

Micro fair value hedge for holdings at FVTOCI

	REI	EMAINING TERM		CUMULATIVE AMOUNT OF THE HEDGE-RELATED ADJUSTMENT TO THE FAIR VALUE INCLUDED IN THE CARRYING AMOUNT OF THE HEDGED ITEM RECOGNISED IN THE BALANCE SHEET CARRYING AMOUNTS		CHANGE IN FAIR VALUE USED TO RECOGNISE AN		
€ millions	LESS THAN 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	INEFFECTIVE- NESS IN THE HEDGE FOR THE PERIOD
Balance as at 30/6/2024		0.27.00	0.127.110	7.002.10		7.002.0		
Nominal								
Hedged items								
EUR	945	4,313	3,613	_	_	_		
USD	698	3,171	476		_			
Hedging transactions		0,						
EUR	945	4,313	3,613		_			
USD	687	3,235	476		_	_		_
Interest rate sensitivities in bps		-,						
Hedged items								
EUR		(1)	(3)		_	_		
USD		(1)	— (o)			_	_	_
Hedging transactions		(1)						
EUR	_	1	3	_	_	_	_	_
USD	_	1			_	_	_	_
Carrying amounts								
Hedged items				369	_	12,438		
Hedging transactions				_	_	226	3	_
Hedge result							-	(6
Hedged items					_			(99
Hedging transactions	_	_	_	_	_	_	_	9:
Balance as at 31/12/2023								
Nominal								
Hedged items								
EUR	1,206	3,102	1,788	_	_	_	_	_
USD	587	2,741	54	_	_	_	_	_
Hedging transactions		,		_	_	_	_	_
EUR	1,206	3,027	1,738	_	_	_	_	_
USD	63	2,767	88	_	_	_	_	_
Interest rate sensitivities in bps		,						
Hedged items								
EUR	_	(1)	(1)	_	_	_	_	_
USD	_	(1)	_	_	_	_	_	_
Hedging transactions		\ /						
EUR	_	1	1	_	_	_	_	_
USD	_	1	_	_	_	_	_	_
Carrying amounts								
Hedged items	_	_	_	(293)	_	9,215	_	_
Hedging transactions		_	_		_	283	11	_
Hedge result								
Hedged items				_	_			333
Hedging transactions				_			_	(324

Notes to the Income Statement (CONTINUED)

The table shown above compares the nominal amounts of the hedged items and the hedging transactions. In addition, interest rate sensitivities are stated in basis points (bps). This means that if the interest rate changes by one basis point (0.01%), the fair value will change by the amount stated in euro millions. The statement of interest rate sensitivities in bps is a suitable instrument for describing the effectiveness of a hedge.

Securities holdings, which are allocated to the balance sheet item "Financial assets at FVTOCI", are hedged against interest rate risks separately for each transaction through a hedging transaction. This includes up-front payments on conclusion of interest rate swaps to compensate for premiums and discounts in the purchase price of securities, which means that their fair value is not equal to zero at the inception of the hedge. Furthermore, the fair value of derivatives also contains accrued interest (dirty fair value) whereas accrued interest for hedged items is allocated to these directly and is thus not included in the cumulative amount of hedge-related adjustments to the carrying amount of the hedged items. Consequently, the net fair value of hedging derivatives does not equal the cumulative amount of hedge-related adjustments to the carrying amount of the hedged items.

Micro fair value hedge for holdings at cost

The micro fair value hedges for holdings at cost (loans and receivables with customers) are shown below:

	REI	MAINING TERM		CUMULATIVE AM HEDGE-RELATED TO THE FAIR VAL IN THE CARRYING THE HEDGED ITEM IN THE BALAN	ADJUSTMENT UE INCLUDED AMOUNT OF I RECOGNISED	CARRYING	G AMOUNTS	CHANGE IN FAIR VALUE USED TO RECOGNISE AN
_	LESS	1 YEAR	MORE	IN THE BALA		- Ozarat i inte	AMOUNTO	INEFFECTIVE- NESS IN THE
€ millions	THAN 1 YEAR	TO 5 YEARS	THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	HEDGE FOR THE PERIOD
Balance as at 30/6/2024								-
Nominal								
Hedged items								
JPY	_	233	349	_	_	_	_	_
USD	_	366	_	_	_	_	_	_
EUR	_		_	_	_		_	_
Hedging transactions								
JPY		665	633		_			_
USD		317	_		_		_	_
EUR	_	_	_		_	_	_	_
Interest rate sensitivities in bps								
Hedged items								
JPY					_	_	_	
USD								
EUR								
Hedging transactions								
* *								
JPY USD								
EUR								
Carrying amounts								
Hedged items				(47)		958		
Hedging transactions					_	17		
Hedge result								(68)
Hedged items					_			(7)
Hedging transactions								(61)
Balance as at 31/12/2023								
Nominal								
Hedged items								
JPY		256	204					
		256	384					
USD		356						
EUR								
Hedging transactions		F						
JPY		584	808		<u> </u>			
USD		357						
EUR								
Interest rate sensitivities in bps								
Hedged items								
JPY								
USD					<u> </u>	_	_	
EUR								
Hedging transactions								
JPY					_			
USD				_	_		_	_
EUR		_						
Carrying amounts								
Hedged items	_		_	(45)		1,021	_	
Hedging transactions	_	_	_	_	_	_	22	
Hedge result								(15)
Hedged items	_	_	_	_	_	_	_	23
Hedging transactions	_	_	_	_	_	_	_	(38)

Notes to the Income Statement (CONTINUED)

The nominal amounts of hedged items and hedging transactions are compared in the table above. In addition, the interest rate sensitivities are stated in basis points (bps). This means that if the interest rate changes by one basis point (0.01%), the fair value will change by the amount stated in euro millions. The statement of interest rate sensitivities in bps is a suitable instrument for describing the effectiveness of a hedge. With regard to hedging derivatives, it should be noted that these were concluded with London Clearing House and are therefore subject to the existing offsetting rules (see Note "Disclosures regarding the offsetting of financial assets and liabilities").

Portfolio fair value hedge

	DEM	AINING TERM		CUMULATIVE AMO HEDGE-RELATED A TO THE FAIR VALL IN THE CARRYING THE HEDGED ITEM IN THE BALANG	ADJUSTMENT JE INCLUDED AMOUNT OF ECOGNISED	CARRYING	AMOLINITS	CHANGE IN FAIR VALUE USED TO RECOGNISE AN
_	LESS	1 YEAR	MORE	IN THE BALANC	JE SHEET	CARRING	AWOUNTS	INEFFECTIVE- NESS IN THE
€ millions	THAN 1 YEAR	TO 5 YEARS	THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	HEDGE FOR THE PERIOD
Balance as at 30/6/2024								
Interest rate sensitivities in bps								
Hedged items								
EUR	1	3	1	_	_	_	_	_
USD	_	_	_	_	_	_	_	_
CHF	_	_	_	_	_	_	_	_
Hedging transactions								
EUR	(1)	(3)	(1)	_	_	_	_	_
USD	_	_	_	_	_	_	_	_
CHF	_	_	_	_	_	_	_	_
Carrying amounts								
Hedged items	_	_	_	_	(3,919)	_	_	_
Hedging derivatives	_	_	_	_	_	38	92	_
Hedge result								(76)
Hedged items	_	_	_	_	_	_	_	144
Hedging transactions	_	_	_	_	_	_	_	(220)
Balance as at 31/12/2023								
Interest rate sensitivities in bps								
Hedged items								
EUR	1	4	7	_	_	_	_	_
USD	_	_	_	_	_	_	_	_
CHF	_	_	_	_	_	_	_	_
Hedging transactions								
EUR	(1)	(4)	(7)	_	_	_	_	_
USD	_	_	_	_	_	_	_	_
CHF	_	_	_	_	_	_	_	_
Carrying amounts								
Hedged items	_	_	_	_	(3,763)	_	_	_
Hedging derivatives	_	_	_	_	_	126	70	_
Hedge result								(195)
Hedged items	_	_	_	_	_	_	_	(1,722)
Hedging transactions	_	_	_	_	_	_	_	1,527

HVB Group has exercised the option of continuing to apply the provisions of IAS 39 on hedge accounting. The portfolio fair value hedge will thus be continued.

In line with the standard bank risk management procedures for hedging fixed interest rate risks, the interest rate risks entailed in hedged items are managed on a cross-item basis in the portfolio fair value hedge. For this purpose, the interest rate-relevant cash flows of hedged items (loans and receivables with banks (at cost), loans and receivables with customers (at cost), deposits from banks, deposits from customers and debt securities) are allocated separately by currency to maturity buckets and the net position is determined. The interest rate hedging derivatives concluded thus relate to net interest rate risk positions across several items in the respective maturity buckets and not to specific hedged items. The designated hedge relationships are dedesignated every two weeks and then redesignated. As a hedged item may thus have different effects in the respective maturity bucket, hedge accounting effects are presented by reference to interest sensitivity. The statement of interest rate sensitivity by maturity bucket represents an adequate measure for determining hedged interest rate risks. The table shows the changes in fair value in euro millions if the interest rate changes by one basis point (bp or 0.01%).

17 Net gains/losses on derecognition of financial instruments measured at cost

€ millions	1/1-30/6/2024	1/1-30/6/2023
Loans and receivables (performing)	(4)	(3)
Buy-backs of securities issued and other liabilities	1	(1)
Promissory notes (assets side)	2	2
Total	(1)	(2)

18 Net other expenses/income

€ millions	1/1-30/6/2024	1/1-30/6/2023
Other income	73	103
Sale of land and buildings	2	_
Rental income	25	20
Valuation/disposals of investment properties	1	25
Other	45	58
Other expenses	(36)	(251)
Sale of land and buildings	_	_
Valuation/disposals of investment properties	(11)	(18)
Expenses of investment properties	(4)	(3)
Bank levy	_	(179)
Other	(21)	(51)
Total	37	(148)

Notes to the Income Statement (CONTINUED)

Net other expenses/income attributable to related parties

The item "Net other expenses/income" includes the following amounts attributable to related parties:

€ millions	1/1-30/6/2024	1/1-30/6/2023
Non-consolidated affiliates	24	15
of which:		
UniCredit S.p.A.	15	7
sister companies	9	8
Joint ventures	_	_
Associates	_	_
Other investees	_	_
Total	24	15

19 Operating costs

€ millions	1/1/-30/6/2024	1/1/-30/6/2023
Payroll costs	(612)	(665)
Wages and salaries	(497)	(547)
Social security costs	(81)	(87)
Expenses for pensions and similar employee benefits	(34)	(31)
Other administrative expenses	(525)	(532)
Amortisation, depreciation and impairment losses	(44)	(79)
on property, plant and equipment	(26)	(54)
on software and other intangible assets, excluding goodwill	(2)	(2)
on right-of-use assets (leases)	(16)	(23)
Total	(1,181)	(1,276)

Operating costs of related parties

The item "Operating costs" includes the following amounts attributable to related parties:

€ millions	1/1-30/6/2024	1/1-30/6/2023
Non-consolidated affiliates	(278)	(270)
of which:		
UniCredit S.p.A.	(272)	(263)
sister companies	(1)	(1)
subsidiaries	(5)	(6)
Joint ventures	_	_
Associates	_	_
Other investees	_	_
Total	(278)	(270)

20 Net write-downs of loans and provisions for guarantees and commitments

€ millions	1/1-30/6/2024	1/1-30/6/2023
Additions	(599)	(365)
Allowances for losses on loans and receivables at cost	(519)	(266)
Allowances for losses on loans and receivables at FVTOCI	_	_
Allowances for losses on guarantees and indemnities	(80)	(99)
Reversals	451	295
Allowances for losses on loans and receivables at cost	324	198
Allowances for losses on loans and receivables at FVTOCI	_	1
Allowances for losses on guarantees and indemnities	127	96
Gains/(losses) from non-substantial modification	1	1
Recoveries from write-offs of loans and receivables	15	19
Gains/(losses) on the disposal of impaired loans and receivables	_	_
Total	(132)	(50)

In the reporting period, net additions to net write-downs of loans and provisions for guarantees and commitments totalled €132 million after net additions of €50 million to net write-downs of loans and provisions for guarantees and commitments in the previous-year period. The individual effects that offset each other are described below.

In the reporting period, a net amount of €156 million in portfolio allowances (general loan loss provisions - GLLP) was reversed following a net reversal of €31 million in the previous-year period. The models used to calculate expected credit losses generally reflect effects from the adjustment of macroeconomic factors. In addition, overlays were applied in 2022 and 2023 for certain sub-portfolios that are particularly sensitive to specific risks. These overlays are to be considered supplementary measures to the expected loss models. On the one hand, these specific risks are geopolitical risks caused by the sudden increase in energy costs, inflation and interest rates for both companies and private individuals. On the other hand, these are risks that have arisen especially in the commercial real estate and construction industry (CRE) as a result of the persistently high level of interest rates.

In the reporting period, there were reversals in both overlays through a shift to specific loan loss allowances and a methodological adjustment regarding the exit from the overlays. A further reversal was the result of an updated calibration of the forward-looking macroeconomic scenarios for local corporate customers. When technically implemented, the planned substitution of the applied post-model adjustment by the new LGD model led to a reversal of GLLPs as the actual effects of implementing the model were smaller than those estimated in the postmodel adjustment.

A reversal also resulted from regular portfolio development. In terms of the macroeconomic situation, a slight deterioration in the outlook has resulted in additions to the GLLPs.

In the reporting period, net additions to specific loan loss provisions total €288 million (including net additions to generalised specific loan loss allowances in the course of implementing the new LGD model) after net additions of €81 million in the previous-year period. Additions to specific loan loss provisions on account of defaults were only partly compensated for by reversals of existing specific loan loss provisions.

Notes to the Income Statement (CONTINUED)

Net write-downs of loans and provisions for guarantees and commitments attributable to related parties The item "Net write-downs of loans and provisions for guarantees and commitments" includes the following amounts attributable to related parties:

€ millions	1/1-30/6/2024	1/1-30/6/2023
Non-consolidated affiliates	_	3
of which:		
UniCredit S.p.A.	_	_
sister companies	_	3
Joint ventures	_	_
Associates	_	_
Other investees	_	_
Total		3

21 Provisions for risks and charges

In the reporting period, net income of €20 million was generated from the reversal of provisions for risks and charges. In contrast, there was a net expense of €13 million from the addition to provisions for risks and charges reported in the previous-year period. No individual items of significance occurred in the reporting period or in the previous-year period.

22 Restructuring costs

The item "Restructuring costs" reports net income from the reversal of a provision no longer required in the amount of €2 million for the reporting period (previous-year period: net expense of €45 million). The expense in the previous-year period was attributable to the assumption of the pro rata costs for restructuring measures of UniCredit S.p.A. by HVB Group relating to the group-wide service offering of IT activities and other group-wide administrative activities.

23 Net gains/losses on remeasurement of consolidated companies

€ millions	1/1-30/6/2024	1/1-30/6/2023
Shares in affiliates	(1)	(2)
Disposal of companies accounted for using the equity method	_	_
Net gains/(losses) on companies accounted for using the equity method	(1)	2
Total	(2)	_

In the reporting year and in the previous year, losses on shares in affiliates are primarily due to the losses generated on the deconsolidation of subsidiaries. In the reporting year and in the previous year, the net gains or losses on remeasurement of companies accounted for using the equity method are mainly attributable to Comtrade Group S.à.r.l., Luxembourg.

Notes to the Balance Sheet

24 Cash and cash balances

€ millions	30/6/2024	31/12/2023
Cash on hand	398	428
Balances with central banks	10,443	22,865
Total	10,841	23,293

25 Financial assets held for trading

€ millions	30/6/2024	31/12/2023
On-balance sheet financial instruments	25,717	22,696
Fixed-income securities	6,520	6,288
Equity instruments	9,265	7,306
Other financial assets held for trading	9,932	9,102
Positive fair values of derivative financial instruments	43,908	45,915
Total	69,625	68,611
of which subordinated assets	25	2

Financial assets held for trading of related partiesThe item "Financial assets held for trading" includes the following amounts attributable to related parties:

	0	9		
€ millions			30/6/2024	31/12/2023
Non-consolidated affiliates			18,823	20,630
of which:				
UniCredit S.p.A.			14,500	15,904
sister companies ¹			4,323	4,726
Joint ventures			_	_
Associates			17	58
Other investees			_	_
Total			18,840	20,688

¹ Mostly derivative transactions involving UniCredit Bank Austria AG.

26 Financial assets at FVTPL

€ millions	30/6/2024	31/12/2023
Fixed-income securities	1,040	1,633
Equity instruments	703	673
Loans and promissory notes	1,757	825
Other	71	84
Total	3,571	3,215
of which:		
subordinated loans and receivables	_	3
past-due loans and receivables	_	_

Notes to the Balance Sheet (CONTINUED)

27 Financial assets at FVTOCI

Financial assets at FVTOCI total €12,591 million as at the reporting date (previous year: €9,252 million).

Changes in carrying amounts

€ millions	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2024	8,818	434	_	_	9,252
Transfers to another stage due to deterioration in credit quality	_	_	_	_	_
Transfers to another stage due to improvement in credit quality	_	_	_	_	_
Changes due to modification not leading to derecognition	_	_	_	_	_
Changes within the stage (net) ¹	3,420	(81)	_	_	3,339
Derecognition (due to uncollectibility)	_	_	_	_	_
Other changes	_	_	_	_	_
Balance as at 30/6/2024	12,238	353	_	_	12,591
Balance as at 1/1/2023	9,824	13		_	9,837
Transfers to another stage due to deterioration in credit quality	(327)	327	_	_	_
Transfers to another stage due to improvement in credit quality	13	(13)	_	_	_
Changes due to modification not leading to derecognition	_	_	_	_	_
Changes within the stage (net)1	(692)	107	_	_	(585)
Derecognition (due to uncollectibility)	_	_	_	_	_
Other changes	_			_	_
Balance as at 31/12/2023	8,818	434	_	_	9,252

¹ Changes within the stage (net) include additions from purchases and disposals from sales and repayments.

The impairment of securities holdings totals €— million (previous year: €— million). The impairment changed by €— million in the reporting period (previous year: reduction of €1 million).

As in the previous year, no modifications were made to fixed-income securities in the reporting period.

No collateral was provided for assets held at FVTOCI in the reporting period or in the previous year.

28 Loans and receivables with banks (at cost)

€ millions	30/6/2024	31/12/2023
Current accounts	887	907
Cash collateral and pledged credit balances	3,653	3,896
Reverse repos	7,100	7,165
Securities	7,978	6,122
Other loans to banks	2,490	1,442
Non-performing loans and receivables	31	34
Total	22,139	19,566
of which subordinated assets	_	_

Other loans to banks consist mostly of term deposits and bonds.

Changes in gross carrying amounts

€ millions	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2024	19,344	188	81	33	19,646
Addition due to new business	8,089	_	_	_	8,089
Change in carrying amount within the stage	1,699	13	3	_	1,715
Transfers to another stage due to deterioration in credit quality	(15)	15	_	_	_
from Stage 1 to Stage 2	(15)	15	_	_	_
from Stage 2 to Stage 3	_	_	_	_	_
from Stage 1 to Stage 3	_	_	_	_	_
Transfers to another stage due to improvement in credit quality	31	(31)	_	_	_
from Stage 2 to Stage 1	31	(31)	_	_	_
from Stage 3 to Stage 2	_	_	_	_	_
from Stage 3 to Stage 1	_	_	_	_	_
Increase reported directly in equity in gross carrying amounts for interest claims not recognised in profit or loss	_	_	_	_	_
Changes due to modification of assets not leading to derecognition	_	_	_	_	
Disposals due to repayments/sales	(7,077)	(37)	(7)	_	(7,121)
Disposals due to write-offs/write downs of loans and receivables					
Foreign currency movements and other changes	19	(128)	_	_	(109)
Balance as at 30/6/2024	22,090	20	77	33	22,220
Balance as at 1/1/2023	23,229	107	28	33	23,397
Addition due to new business	11,144	_	_	_	11,144
Change in carrying amount within the stage	(2,704)	(31)	1	_	(2,734)
Transfers to another stage due to deterioration in credit quality	(230)	177	53	_	_
from Stage 1 to Stage 2	(224)	224	_	_	_
from Stage 2 to Stage 3	_	(47)	47	_	_
from Stage 1 to Stage 3	(6)	_	6	_	_
Transfers to another stage due to improvement in credit quality	2	(2)	_	_	_
from Stage 2 to Stage 1	2	(2)	_	_	_
from Stage 3 to Stage 2	_	_	_	_	_
from Stage 3 to Stage 1	_	_	_	_	_
Increase reported directly in equity in gross carrying amounts for interest claims not recognised in profit or loss	_	_	_	_	_
Changes due to modification of assets not leading to derecognition	_	_	_	_	_
Disposals due to repayments/sales	(12,073)	(63)	(1)		(12,137)
Disposals due to write-offs/write downs of loans and receivables		_	_		
Foreign currency movements and other changes	(24)	_	_	_	(24)
Balance as at 31/12/2023	19,344	188	81	33	19,646

Notes to the Balance Sheet (CONTINUED)

Changes in allowances

€ millions	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2024	_	_	56	24	80
Addition due to new business	_	_	_	_	_
Change in carrying amount within the same stage	_	_	_	_	_
Transfers to another stage due to deterioration in credit quality	_	_	_	_	_
from Stage 1 to Stage 2	_	_	_	_	_
from Stage 2 to Stage 3	_	_	_	_	_
from Stage 1 to Stage 3	_	_	_	_	_
Transfers to another stage due to improvement in credit quality	_	_	_	_	_
from Stage 2 to Stage 1	_	_	_	_	_
from Stage 3 to Stage 2	_	_	_	_	_
from Stage 3 to Stage 1	_	_	_	_	_
Increase in impairment reported directly in equity for interest claims not recognised in profit or loss	_	_	_	_	_
Changes due to modification of assets not leading to derecognition					
Disposals (reversal due to disposal of receivable)	_	_	(1)	_	(1)
Disposals (utilisation of impairments)					
Reversal of the discounted amount and recognition of interest claims not previously recognised in profit or loss	_	_	_	_	_
Foreign currency movements and other changes	1		1		2
Balance as at 30/6/2024	1		56	24	81
Balance as at 1/1/2023	2	34	13	9	58
Addition due to new business	_	_	_	_	_
Change in carrying amount within the same stage	1	(7)	22	15	31
Transfers to another stage due to deterioration in credit quality	(2)	(23)	22	_	(3)
from Stage 1 to Stage 2	(2)	1	_	_	(1)
from Stage 2 to Stage 3	_	(24)	22	_	(2)
from Stage 1 to Stage 3	_	_	_	_	_
Transfers to another stage due to improvement in credit quality	_	_	_	_	_
from Stage 2 to Stage 1	_	_	_	_	_
from Stage 3 to Stage 2	_	_	_	_	_
from Stage 3 to Stage 1	_	_	_	_	_
Increase in impairment reported directly in equity for interest claims not recognised in profit or loss	_	_	_	_	_
Changes due to modification of assets not leading to derecognition	_	_	_	_	_
Disposals (reversal due to disposal of receivable)	(1)	(3)	_	_	(4)
Disposals (utilisation of impairments)		_			
Reversal of the discounted amount and recognition of interest claims not previously recognised in profit or loss	_			_	
Foreign currency movements and other changes		(1)	(1)	_	(2)
Balance as at 31/12/2023	_	_	56	24	80

Loans and receivables with related parties

The item "Loans and receivables with banks (at cost)" includes the following amounts attributable to related parties:

€ millions	30/6/2024	31/12/2023
Non-consolidated affiliates	227	845
of which:		
UniCredit S.p.A.	174	789
sister companies ¹	53	56
Joint ventures	_	_
Associates	74	77
Other investees	59	47
Total	360	969

¹ Mainly due from UniCredit Bank Austria AG.

29 Loans and receivables with customers (at cost)

€ millions	30/6/2024	31/12/2023
Current accounts	8,713	7,604
Cash collateral and pledged cash balances	2,246	2,420
Reverse repos	2,284	1,010
Mortgage loans	53,697	54,015
Finance lease receivables	306	388
Securities	31,574	29,099
Other loans and receivables	58,754	58,204
Non-performing loans and receivables	1,639	1,737
Total	159,213	154,477
of which subordinated assets	_	_

Other loans and receivables largely comprise miscellaneous other loans, instalment loans, term deposits and refinanced special credit facilities.

The item "Loans and receivables with customers (at cost)" includes an amount of €4,707 million (previous year: €4,738 million) funded under the fully consolidated Arabella conduit programme. This mainly involves buying shortterm trade receivables and medium-term receivables under lease agreements from customers and funding them by issuing commercial paper on the capital market. The securitised loans and receivables are essentially loans and receivables due from European debtors.

Notes to the Balance Sheet (CONTINUED)

Changes in gross carrying amounts

€ millions	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2024	132,666	20,795	2,831	4	156,296
Addition due to new business	20,223	_	_	_	20,223
Change in carrying amount within the stage	2,219	135	(34)	(2)	2,318
Transfers to another stage due to deterioration in credit quality	(5,295)	4,746	549	_	_
from Stage 1 to Stage 2	(5,151)	5,151	_	_	_
from Stage 2 to Stage 3	_	(405)	405	_	_
from Stage 1 to Stage 3	(144)	_	144	_	_
Transfers to another stage due to improvement in credit quality	7,803	(7,750)	(53)	_	_
from Stage 2 to Stage 1	7,780	(7,780)	_	_	_
from Stage 3 to Stage 2	_	30	(30)	_	_
from Stage 3 to Stage 1	23	_	(23)	_	_
Increase reported directly in equity in gross carrying amounts for interest claims not recognised in profit or loss	_	_	76	_	76
Changes due to modification of assets not leading to derecognition			(12)		(12)
Disposals due to repayments/sales	(13,794)	(3,728)	(319)	_	(17,841)
Disposals due to write-offs/write downs of loans and receivables	_	_	(157)	_	(157)
Foreign currency movements and other changes	141	15	(3)	_	153
Balance as at 30/6/2024	143,963	14,213	2,878	2	161,056
Balance as at 1/1/2023	136,190	17,774	2,725	4	156,693
Addition due to new business	27,217	_	_	_	27,217
Change in carrying amount within the stage	(447)	102	(198)	_	(543)
Transfers to another stage due to deterioration in credit quality	(11,758)	10,652	1,106	_	_
from Stage 1 to Stage 2	(11,270)	11,270	_	_	_
from Stage 2 to Stage 3	_	(618)	618	_	_
from Stage 1 to Stage 3	(488)	_	488	_	_
Transfers to another stage due to improvement in credit quality	4,661	(4,542)	(119)	_	_
from Stage 2 to Stage 1	4,623	(4,623)	_	_	_
from Stage 3 to Stage 2	_	81	(81)	_	_
from Stage 3 to Stage 1	38	_	(38)	_	_
Increase reported directly in equity in gross carrying amounts for interest claims not recognised in profit or loss	_	_	153	_	153
Changes due to modification of assets not leading to derecognition	_	2	8	_	10
Disposals due to repayments/sales	(22,862)	(3,184)	(612)		(26,658)
Disposals due to write-offs/write downs of loans and receivables			(220)		(220)
Foreign currency movements and other changes	(335)	(9)	(12)		(356)
			2,831		156,296

Changes in allowances

€ millions	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2024	158	563	1,096	2	1,819
Addition due to new business	9	_	_	_	9
Change in carrying amount within the same stage	46	20	161	(1)	226
Transfers to another stage due to deterioration in credit quality	(50)	93	173	_	216
from Stage 1 to Stage 2	(49)	110	_	_	61
from Stage 2 to Stage 3	_	(17)	147	_	130
from Stage 1 to Stage 3	(1)	_	26	_	25
Transfers to another stage due to improvement in credit quality	32	(204)	(6)	_	(178)
from Stage 2 to Stage 1	32	(205)	_	_	(173)
from Stage 3 to Stage 2	_	1	(6)	_	(5)
from Stage 3 to Stage 1	_	_	_	_	_
Increase in impairment reported directly in equity for interest claims not recognised in profit or loss	_	_	76	_	76
Changes due to modification of assets not leading to derecognition	_	_	_	_	_
Modification of model		_	23	_	23
Disposals (reversal due to disposal of receivables)	(41)	(24)	(66)	_	(131)
Disposals (utilisation of impairments)	_		(151)		(151)
Reversal of the discounted amount and recognition of interest claims not previously recognised in profit or loss	_	_	(45)	_	(45)
Foreign currency movements and other changes		_	(21)	_	(21)
Balance as at 30/6/2024	154	448	1,240	1	1,843
Balance as at 1/1/2023	201	591	1,024	2	1,818
Addition due to new business	34	_	_	_	34
Change in carrying amount within the same stage	14	(109)	119	_	24
Transfers to another stage due to deterioration in credit quality	(112)	248	310	_	446
from Stage 1 to Stage 2	(108)	311	_	_	203
from Stage 2 to Stage 3		(63)	267	_	204
from Stage 1 to Stage 3	(4)		43	_	39
Transfers to another stage due to improvement in credit quality	27	(72)	(38)	_	(83)
from Stage 2 to Stage 1	27	(81)	_	_	(54)
from Stage 3 to Stage 2	_	9	(35)	_	(26)
from Stage 3 to Stage 1		_	(3)	_	(3)
Increase in impairment reported directly in equity for interest claims not recognised in profit or loss	_	_	153	_	153
Changes due to modification of assets not leading to derecognition	_	_	_	_	_
Modification of model	_	_	_	_	_
Disposals (reversal due to disposal of receivables)	(6)	(95)	(201)	_	(302)
Disposals (utilisation of impairments)	_	_	(211)	_	(211)
Reversal of the discounted amount and recognition of interest claims not previously recognised in profit or loss	_	_	(61)	_	(61)
Foreign currency movements and other changes	_		1		1
Balance as at 31/12/2023	158	563	1,096	2	1,819

Notes to the Balance Sheet (CONTINUED)

In the first half of 2024, total portfolio valuation allowances (Stage 1 and Stage 2) for loans and receivables with customers decreased by €119 million.

In 2022 and 2023, HVB applied overlays for certain sub-portfolios which are particularly sensitive to certain risks that are not fully captured by the expected loss models. In the reporting period, these overlays were reduced due to methodological adjustments and the transfer to specific loan loss provisions.

An updated calibration of the forward-looking macroeconomic scenarios for local corporate customers resulted in a reduction of general loan loss provisions (GLLP). When technically implemented, the planned substitution of the applied post-model adjustment by the new LGD model led to a reversal of GLLPs as the actual effects of implementing the model were smaller than those estimated in the post-model adjustment. In terms of the macroeconomic situation, a slight deterioration in the outlook has resulted in additions to the GLLPs which, however, are more than compensated for by the reductions.

In the reporting period, there was a net increase in specific valuation allowances of €144 million. Additions to specific valuation allowances on account of defaults were only partially compensated for by reversals of existing specific valuation allowances.

Loans and receivables with related parties

The item "Loans and receivables with customers (at cost)" includes the following amounts attributable to related parties:

€ millions Non-consolidated affiliates of which:		
	30/6/2024	31/12/2023
of which:	37	34
sister companies	33	30
subsidiaries	4	4
Joint ventures	_	_
Associates	_	_
Other investees	321	320
Total	358	354

30 Hedging derivatives

€ millions	30/6/2024	31/12/2023
Micro fair value hedge	243	283
Portfolio fair value hedge ¹	38	126
Total	281	409

¹ The cross-currency interest rate swaps used in hedge accounting are carried at their aggregate fair value in the portfolio fair value hedge.

31 Investments in associates and joint ventures accounted for using the equity method

€ millions	30/6/2024	31/12/2023
Associates accounted for using the equity method	17	17
of which goodwill	_	_
Joint ventures accounted for using the equity method	_	_
Total	17	17

32 Property, plant and equipment

€ millions	30/6/2024	31/12/2023
Land	1,044	1,103
Buildings	661	688
Plant and office equipment	112	121
Right-of-use assets (leases)	134	138
of which land and buildings	126	130
Total	1,951	2,050

Notes to the Balance Sheet (CONTINUED)

Changes in property, plant and equipment

€ millions	LAND	BUILDINGS	PLANT AND OFFICE EQUIPMENT	RIGHT- OF-USE ASSETS (LEASES)	TOTAL PROPERTY, PLANT AND EQUIPMENT
Acquisition costs as at 1/1/2024	1,103	2,370	583	340	4,396
Write-downs and write-ups from previous years		(1,682)	(462)	(202)	(2,346)
Carrying amounts as at 1/1/2024	1,103	688	121	138	2,050
Additions	.,				
Acquisition/production costs	_	2	4	20	26
Adjustment due to revaluation in reporting period (OCI)	5	21			26
Write-ups		4		3	7
Changes from currency translation	_		_		
Other additions ¹			1	3	4
Disposals			· ·		
Sales		_		(6)	(6)
Adjustment due to revaluation in reporting period (OCI)	(34)	(16)			(50)
Depreciation and write-downs	(01)	(13)	(9)	(16)	(38)
Impairments	(2)	(8)		(1)	(11)
Changes from currency translation	(2)	(0)		(1)	(,
Non-current assets or disposal groups held for sale	(28)	(17)			(45)
Other disposals ¹	(20)	(17)	(5)	(7)	(12)
Carrying amounts as at 30/6/2024	1,044	661	112	134	1,951
Write-downs and write-ups from previous years plus the reporting period	1,044	1,632	448	185	2,265
Acquisition costs as at 30/6/2024	1,044	2,293	560	319	4,216
Addition costs as at consister	1,044	2,200		010	7,210
Acquisition costs as at 1/1/2023	1,200	2,483	693	363	4,739
Write-downs and write-ups from previous years		(1,607)	(563)	(200)	(2,370)
Carrying amounts as at 1/1/2023	1,200	876	130	163	2,369
Additions	.,				
Acquisition/production costs		13	22	24	59
Adjustment due to revaluation in reporting period (OCI)	16	24			40
Write-ups		37	2	10	49
Changes from currency translation	_				
Other additions ¹	1	4	3	24	32
Disposals					
Sales	(1)		(3)	(17)	(21)
Adjustment due to revaluation in reporting period (OCI)	(110)	(145)	_	_	(255)
Depreciation and write-downs	_	(30)	(26)	(40)	(96)
Impairments	(1)	(85)	(5)	(9)	(100)
Changes from currency translation			_	(1)	(1)
Non-current assets or disposal groups held for sale	(2)	(2)			(4)
Other disposals ¹	(=)	(4)	(2)	(16)	(22)
Carrying amounts as at 31/12/2023	1,103	688	121	138	2,050
Write-downs and write-ups from previous years plus the reporting period		1,682	462	202	2,346
Acquisition costs as at 31/12/2023	1,103	2,370	583	340	4,396

¹ Including changes in the group of companies included in consolidation.

33 Investment properties

Investment properties are measured at fair value. As each property is unique and the fair value is determined by external expert opinions that take into account the special features of the property being valued, all fair values for investment properties reported in this balance sheet item are allocated to Level 3.

The net carrying amount of right-of-use assets from lease agreements classified as investment properties under this balance sheet item is €44 million as at the reporting date (previous year: €52 million).

Changes in investment properties

€ millions	2024	2023
Carrying amounts as at 1/1	254	351
Additions		
Acquisitions	_	_
Valuation gains	1	22
Subsequent expenses	2	4
Changes from currency translation	_	_
Other additions ¹	_	_
Disposals		
Sales	_	_
Valuation losses	(11)	(91)
Changes from currency translation	_	_
Non-current assets or disposal groups held for sale	(60)	(32)
Other disposals ¹	_	_
Carrying amounts as at 30/6/2024 / 31/12/2023	186	254

¹ Also including changes in the group of companies included in consolidation.

34 Intangible assets

€ millions	30/6/2024	31/12/2023
Internally generated intangible assets	2	2
Other intangible assets	8	4
Total	10	6

HVB no longer generates any software internally. Software is provided to HVB groupwide by UniCredit S.p.A.

Notes to the Balance Sheet (CONTINUED)

35 Non-current assets or disposal groups held for sale

€ millions	30/6/2024	31/12/2023
Cash and cash balances	_	_
Financial assets at FVTPL	_	_
Financial assets at FVTOCI	_	_
Loans and receivables with banks (at cost)	3	14
Loans and receivables with customers (at cost)	93	17
Investments in associates and joint ventures accounted for using the equity method	_	_
Property, plant and equipment	45	4
Investment properties	92	32
Intangible assets	_	_
Tax assets	_	_
Inventories (IAS 2)	_	_
Other assets	1	_
Total	234	67

As at 30 June 2024, non-current assets or disposal groups held for sale include the following selling activities:

- Planned sale of the subsidiary Monnet 8-10 S.à.r.I., Luxembourg, allocated to the Other operating segment. The closing of the sale is expected in the second half of 2024.
- Planned sale of the subsidiary Weicker S.à.r.l., Luxembourg, allocated to the Other operating segment. The closing of the sale is expected in the second half of 2024.
- Planned sale of one non-strategic property (investment property, allocated to Level 2). The closing of the sale is expected in the second half of 2024.

Furthermore, HVB has decided to reduce the volume of non-performing loans and receivables with customers by selling them. The change in loans and receivables with customers (at cost) in the first half of 2024 is largely due to this sales initiative and includes both additions as a result of reclassifications as well as disposals as a result of sales.

The planned sale of the subsidiary Monnet 8-10 S.à r.l., Luxembourg, mainly relates to a property reported under property, plant and equipment.

The planned sale of the subsidiary Weicker S.à r.l., Luxembourg, mainly relates to a property reported under investment properties (allocated to Level 3).

The sale of the subsidiary Structured Invest Société Anonyme, Luxembourg, was closed in the first half of 2024.

No impairments were required to be recognised for non-current assets or disposal groups held for sale in the reporting year or in the previous year.

Fair value level hierarchy

Assets or liabilities whose valuation is derived from input data (valuation parameters) that is directly observable (as prices) or indirectly observable (derived from prices) are generally shown in Level 2. A price cannot be observed on an active market for the assets or liabilities concerned themselves. Since properties are unique, there can be no trading for the same property or any observable price for it on an active market. However, offers submitted in the course of a selling process constitute observable input data for determining a fair value, as the property may be sold at this price on the basis of binding or reliable non-binding offers.

Level 3 generally relates to assets or liabilities whose fair value is not determined exclusively on the basis of observable market data (non-observable input data). External valuation reports are based on generally recognised valuation methods that use parameters determined by external assessors for the property (such as the current market rent assumed for the property). The respective fair values therefore feature valuation parameters that are based on model assumptions.

The following table shows the allocation of the investment properties measured at fair value to the respective fair value level hierarchy:

	FAIR VALUE BASED PARAMETERS OE THE MAR (LEVEL	SERVED ON KET	FAIR VALUE BASE PARAMETERS NO THE MA (LEVE	T OBSERVED ON ARKET
€ millions	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Investment properties, classified as non-current assets or disposal groups held for sale	32	32	60	_

Changes in investment properties allocated to Level 3:

€ millions	2024	2023
Carrying amount as at 1/1	_	-
Additions to the portfolio (classified as Level 3)	60	_
Positive fair value changes (classified as Level 3)	_	_
Additions due to reclassification from Level 2 to Level 3	_	_
Disposals from the portfolio (classified as Level 3)	_	_
Negative fair value changes (classified as Level 3)	_	_
Disposals due to reclassification from Level 3 to Level 2	_	_
Carrying amount as at 30/6/2024 / 31/12/2023	60	-

There were no reclassifications from Level 2 to Level 3.

Notes to the Balance Sheet (CONTINUED)

36 Other assets

Other assets include prepaid expenses of €137 million (previous year: €141 million). At the reporting date, the excess of assets over liabilities from offsetting the present value of the defined pension obligations against the fair value of the plan assets of defined benefit plans is also recognised under other assets as a capitalised excess cover of plan assets totalling €27 million (previous year: €41 million).

The commodities totalling €218 million included in other assets in the previous year were sold in full in the 2024 reporting year.

37 Deposits from banks

€ millions	30/6/2024	31/12/2023
Deposits from central banks	4,263	7,167
Deposits from banks	34,942	28,506
Current accounts	2,499	1,705
Cash collateral and pledged credit balances	8,805	8,513
Repos	7,744	2,764
Term deposits	1,924	870
Other liabilities	13,970	14,654
Total	39,205	35,673

Deposits from central banks no longer include any liabilities from the participation in the TLTRO III programme as at the reporting date (previous year: €5.8 billion). The remaining funds totalling €5.8 billion were repaid in the first half of 2024.

Amounts payable to related parties

The item "Deposits from banks" includes the following amounts attributable to related parties:

€ millions	30/6/2024	31/12/2023
Non-consolidated affiliates	2,603	3,564
of which:		
UniCredit S.p.A.	1,990	2,806
sister companies ¹	613	758
Joint ventures	_	_
Associates	113	165
Other investees	20	19
Total	2,736	3,748

¹ Largest single items relate to UniCredit Bank Austria AG.

38 Deposits from customers

€ millions	30/6/2024	31/12/2023
Current accounts	69,629	76,197
Cash collateral and pledged credit balances	2,606	2,781
Savings deposits	4,011	5,709
Repos	6,349	1,089
Term deposits	48,251	48,253
Promissory notes	618	680
Lease liabilities	246	275
Other liabilities	5,118	4,573
Total	136,828	139,557

Amounts payable to related parties
The item "Deposits from customers" includes the following amounts attributable to related parties:

€ millions	30/6/2024	31/12/2023
Non-consolidated affiliates	18	16
of which:		
sister companies	4	2
subsidiaries	14	14
Joint ventures	_	_
Associates	_	_
Other investees	305	290
Total	323	306

39 Debt securities in issue

€ millions	30/6/2024	31/12/2023
Bonds	33,549	34,274
of which:		
registered Mortgage Pfandbriefe	2,945	3,098
registered Public-sector Pfandbriefe	988	1,056
Mortgage Pfandbriefe	18,376	18,255
Public-sector Pfandbriefe	2,289	2,265
registered bonds	1,900	1,945
Other securities		_
Total	33,549	34,274

Notes to the Balance Sheet (CONTINUED)

Debt securities in issue, payable to related parties

The item "Debt securities in issue" includes the following amounts attributable to related parties:

€ millions	30/6/2024	31/12/2023
Non-consolidated affiliates	3,557	3,571
of which:		
UniCredit S.p.A.	3,557	3,571
sister companies	_	-
Joint ventures	_	_
Associates	_	_
Other investees	2	2
Total	3,559	3,573

40 Financial liabilities held for trading

€ millions	30/6/2024	31/12/2023
Negative fair values of derivative financial instruments	40,948	42,574
Other financial liabilities held for trading	7,788	5,963
Total	48,736	48,537

The negative fair values of derivative financial instruments are carried as financial liabilities held for trading. In addition, warrants, certificates and bonds issued by our Trading area as well as delivery obligations from short sales of securities, insofar as they serve trading purposes, are included here under other financial liabilities held for trading.

41 Financial liabilities at FVTPL

This item in the amount of €4,215 million (previous year: €4,660 million) primarily contains own structured issues.

42 Hedging derivatives

€ millions	30/6/2024	31/12/2023
Micro fair value hedge	3	32
Portfolio fair value hedge ¹	92	71
Total	95	103

¹ The cross-currency interest rate swaps used in hedge accounting are carried at their aggregate fair value in the portfolio fair value hedge.

43 Hedge adjustment of hedged items in the portfolio fair value hedge

The hedge adjustment of interest rate-hedged receivables and liabilities in the portfolio fair value hedge totals net minus €3,919 million (previous year: minus €3,763 million). The fair value of the netted portfolio fair value hedge derivatives represents a net comparable amount resulting from a countermovement. Based on the rules of IAS 39.89A in conjunction with IAS 39.AG123, the nature of the hedged item determines its allocation either to the asset side or to the liabilities side, which means that a positive hedge adjustment for hedged liabilities and an excess of liabilities over assets is to be reported in the respective maturity buckets of the portfolio fair value hedge as a negative figure on the liabilities side.

44 Liabilities of disposal groups held for sale

€ millions	30/6/2024	31/12/2023
Deposits from banks	_	_
Deposits from customers	_	_
Tax liabilities	_	2
Other liabilities	_	11
Provisions	_	_
Total	_	13

As at 31 December 2023, the liabilities of disposal groups held for sale related exclusively to the liabilities of Structured Invest Société Anonyme, Luxembourg, which was sold in the first half of 2024. The company was allocated to the Corporates operating segment.

45 Provisions

€ millions	30/6/2024	31/12/2023
Provisions for pensions and similar obligations	175	132
Provisions for financial guarantees and irrevocable credit commitments	239	284
Restructuring provisions	474	531
Other provisions	624	703
Payroll provisions	352	392
Provisions related to tax disputes (without income taxes)	29	42
Provisions for rental guarantees and dismantling obligations	68	73
Provisions for legal risks and similar risks	131	137
Other provisions	44	59
Total	1,512	1,650

Provisions for pensions and similar obligations

As at 30 June 2024, the provisions for pensions and similar obligations were remeasured on the basis of updated actuarial assumptions and market values of the plan assets. At the reporting date, a net defined benefit liability from defined benefit plans totalling €148 million was calculated for HVB Group, resulting from netting the present value of the aggregate (funded and unfunded) defined benefit obligations (DBO) of €4,155 million with the fair value of the plan assets of €4,007 million.

This amount was recognised in the consolidated balance sheet of HVB Group as at 30 June 2024 as follows:

- The surplus from pension plans with an excess of assets over liabilities was recognised at an amount of €27 million in the consolidated balance sheet as a capitalised excess cover of plan assets under other assets. No adjustments were required for the effects of limiting a net defined benefit asset to the asset ceiling.
- Deficits from pension plans with an excess of liabilities over assets and without an allocation to a plan asset were recognised at an amount of €175 million in the consolidated balance sheet as recognised pension provisions under provisions for pensions and similar obligations.

Notes to the Balance Sheet (CONTINUED)

The following effects resulting from the capital market performance in the first half of 2024 were mainly responsible for the increase in pension provisions (up €43 million / plus 32.6%) and the decline in other assets (down €14 million / minus 34.1%) compared with year-end 2023:

- The increase in the actuarial interest rate (weighted average) by 25 basis points to 3.85% (previous year: 3.60%) resulted in greater discounting of the liabilities under defined benefit obligations and thus to a decrease in the present value of liabilities.
- In contrast, the pension adjustment in line with the consumer price index above the long-term pension trend of 2.25% on which the valuation is based taken into account at the end of the first half of 2024 caused an increase in the DBO which compensated the effect above in part.
- In addition, the decline in the market values of plan assets in the first half of 2024 had the opposite effect.

The actuarial gains as at the reporting date resulting from the calculation of the estimated present value of the defined benefit obligations, offset by the losses from the current market measurement of the plan assets (difference between standardised earnings and earnings actually realised), resulted in a negative total effect from remeasurements of minus €51 million, which was immediately recognised directly in shareholders' equity without affecting profit or loss and reported in other comprehensive income (OCI) within the statement of total comprehensive income.

46 Subordinated capital

The following table shows the breakdown of subordinated capital included in the balance sheet items "Deposits from banks", "Debt securities in issue" and "Shareholders' equity":

€ millions	30/6/2024	31/12/2023
Subordinated liabilities	1,098	1,110
Hybrid capital instruments	1,700	1,700
Total	2,798	2,810

Other Information

47 Report on events after the reporting period

As part of the already announced simplification of the structure of trading activities, UniCredit Bank GmbH transferred a first tranche of trading activities to UniCredit S.p.A. on 14 July 2024. This primarily included fixed-income securities and interest rate derivatives in the held-for-trading portfolio. Further information on the simplification of the structure of trading activities is provided in the section entitled "Forecast Report/Outlook" in the Half-Yearly Financial Report.

On 23 July 2024, UniCredit Bank GmbH approved the transfer of a corporate customer portfolio with Iberian customers from UniCredit Bank Austria AG, Austria, Vienna (likewise a part of the UniCredit corporate group) to UniCredit Bank GmbH subject to customer approval. The transaction is planned to be completed within nine months of signing the contracts.

There were no further events of particular significance after 30 June 2024 to report.

48 Fair value hierarchy

The changes in financial instruments measured at fair value and recognised at fair value in the balance sheet are described below, notably with regard to the fair value hierarchy.

This fair value hierarchy is divided into the following levels:

Level 1 contains financial instruments measured using prices of identical assets or liabilities listed on active markets. These prices are incorporated unchanged. This category mainly includes listed equity instruments, bonds and exchange-traded derivatives.

Level 2 shows assets and liabilities whose valuation is derived from input data (valuation parameters) that are directly observable (prices) or indirectly observable (derived from prices). No price can be observed on an active market for the assets and liabilities concerned themselves. As a result of this, we notably show the fair values of interest rate and credit derivatives in this level together with the fair values of ABS bonds, provided a liquid market exists for the asset class in question.

Financial assets or liabilities of €57 million (previous year: €1,099 million) were transferred from Level 1 to Level 2. At the same time, financial assets or liabilities of €527 million (previous year: €392 million) were transferred from Level 2 to Level 1. Most of the transfers relate to securities and are due to an increase or decrease in the actual trading taking place in the securities concerned and the associated change in the bid-offer spreads and thus in the liquidity of the respective security.

The following table shows transfers between Level 1 and Level 2 for financial instruments where fair value is determined on a recurring basis:

€ millions	TO LEVEL 1	TO LEVEL 2
Financial assets held for trading		
Transfer from Level 1	_	57
Transfer from Level 2	124	_
Financial assets at FVTPL		
Transfer from Level 1	_	_
Transfer from Level 2	25	_
Financial assets at FVTOCI		
Transfer from Level 1	_	_
Transfer from Level 2	378	_
Financial liabilities held for trading		
Transfer from Level 1	_	_
Transfer from Level 2	_	_
Financial liabilities at FVTPL		
Transfer from Level 1	_	_
Transfer from Level 2	_	_

28 June is considered the transfer date for instruments transferred between levels within the reporting period (1 January to 30 June). Therefore, the fair value as at 28 June is used as the value recognised for the transfer in

Level 3 relates to assets or liabilities for which the fair value cannot be calculated exclusively on the basis of observable market data (non-observable input data). The amounts involved are stated in Level 2 if the impact of the non-observable input data on the determination of fair value is insignificant. Thus, the respective fair values also incorporate valuation parameters based on model assumptions. This includes derivatives and structured products that contain at least one "exotic" component, such as foreign currency or interest rate derivatives on illiquid currencies, derivatives without standard market terms, structured products with an illiquid underlying as a reference and ABS bonds of an asset class for which no liquid market exists.

Where the value of a financial instrument is based on non-observable valuation parameters, the value of these parameters may be selected from a range of possible appropriate alternatives at the reporting date. Appropriate values are determined for these non-observable parameters and applied for valuation purposes, upon valuation as at 28 June 2024. In addition, individual parameters that cannot be incorporated separately in the valuation model as standalone valuation parameters are taken into account by applying a model reserve.

The following measurement methods are applied for the individual classes of financial instrument depending on the product type. The measurements of financial instruments in fair value Level 3 depend upon the following significant parameters that cannot be observed on the market:

PRODUCT TYPE	MEASUREMENT METHOD	SIGNIFICANT NON-OBSERVABLE PARAMETERS	RANGE
Fixed-income securities and other debt instruments	Market approach	Price	1bps - 1.300bps
Equities	Market approach	Price	0% - 3%
Asset-backed securities (ABS)	DCF method	Credit spread curves	62bps - 1.552bps
	•	Residual value	0% - 70%
	•	Default rate	0% - 4%
	•	Prepayment rate	0% - 30%
Commodity/equity derivatives	Option price model	Commodity price volatility/equity volatility	1% - 10%
	•	Correlation between commodities/equities	2% - 24%
_	DCF method	Dividend yields	1% - 26%
Interest rate derivatives	DCF method	Swap interest rate	0bps - 587bps
	•	Inflation swap interest rate	3bps - 12bps
_	Option price model	Inflation volatility	1% - 3%
		Interest rate volatility	0% - 29%
	•	Correlation between interest rates	0% - 22%
Credit derivatives	Hazard rate model	Credit spread curves	1bps - 40bps
	•	Residual value	0% - 5%
Currency derivatives	DCF method	Yield curves	0bps - 587bps
_	Option price model	FX volatility	0% - 34%

The sensitivity analysis presented below shows the impact of changing reasonable possible alternative parameter values on the fair value of financial instruments classified as Level 3. The level of variation in non-observable parameters reflects the prevailing market conditions regarding the valuation of sensitivities. For holdings at fair value through profit or loss, the positive and negative fair value changes would amount to a plus or minus of €70 million respectively at the reporting date (previous year: a plus or minus of €64 million respectively).

The following table shows the significant sensitivity effects, broken down by the individual classes of financial instrument for the various product types:

	30/6/2	30/6/2024		31/12/2023	
€ millions	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	
Fixed-income securities and other debt instruments	_	_	_	_	
Equities	_	_	_	_	
Asset-backed securities	_	_	_	_	
Commodity/equity derivatives	64	(64)	59	(59)	
Interest rate derivatives	5	(5)	4	(4)	
Credit derivatives	_	_	_	_	
Currency derivatives	1	(1)	1	(1)	
Total	70	(70)	64	(64)	

For fixed-income securities and other debt instruments as well as asset-backed securities, the credit spread curves were changed in the course of the sensitivity analyses. For equities, the spot price is varied using a relative value.

The following non-observable parameters were varied for the sensitivity analysis for equity derivatives included in Level 3: spot prices for hedge funds, implicit volatility, dividends, implicit correlations and assumptions regarding the interpolation between individual parameters observable on the market, such as volatilities. For interest rate products, interest rates, interest rate correlations and implicit volatilities were varied during the sensitivity analysis. For credit derivatives, shifts in the risk premium curves for credit risk were assumed together with changes in implicit correlations and increases in default rates. Foreign currency derivatives were varied in terms of the implicit volatility.

Where trades are executed for which the trade price deviates from the fair value at the trade date and nonobservable parameters are employed to a considerable extent in valuation models, the financial instrument concerned is recognised at the trade price. This difference between the trade price and the fair value of the valuation model is defined as the trade date gain/loss. Corresponding gains and losses determined at the trade date are deferred and recognised in the income statement over the term of the trade. As soon as a reference price can be determined for the trade on an active market, or the input parameters are based on observable market data, the deferred trade date gain is taken directly to the income statement in net trading income.

The following table shows a year-on-year comparison of changes in trade date gains and losses that were deferred on account of the application of significant non-observable parameters for financial instruments recognised at fair value:

€ millions	2024	2023
Balance as at 1/1	18	27
New trades during the period	1	4
Write-downs	2	(2)
Expired trades	4	_
Retroactive change in observability	2	15
Exchange rate changes	_	_
Balance as at 30/6/2024 / 31/12/2023	11	18

The following table shows the allocation of the financial assets and financial liabilities recognised in the balance sheet at fair value to the respective levels of the fair value hierarchy:

	FAIR VALUE BASED OF VALUATION PARAMETER OBSERVED OBSERVED ON AN ACTIVE MARKET (LEVEL 1) (LEVEL 2)		RAMETERS D ON KET	FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3)		
€ millions	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Financial assets recognised in the balance sheet at fair value						
Financial assets held for trading	21,759	18,285	46,568	49,046	1,298	1,280
of which derivatives	4,540	2,738	38,169	42,020	1,199	1,157
Financial assets at FVTPL	1,063	1,552	886	966	1,622	697
Financial assets at FVTOCI	11,505	8,366	1,086	886	_	_
Hedging derivatives	_	_	278	405	3	4
Financial liabilities recognised in the balance sheet at fair value						
Financial liabilities held for trading	8,521	6,888	38,884	40,383	1,331	1,266
of which derivatives	5,672	4,822	34,477	36,860	799	892
Financial liabilities at FVTPL	_	_	3,768	4,416	447	244
Hedging derivatives	_	_	91	98	4	5

The following table shows the changes in the financial assets allocated to Level 3 in the fair value hierarchy:

€ millions	FINANCIAL ASSETS HELD FOR TRADING	FINANCIAL ASSETS AT FVTPL	FINANCIAL ASSETS AT FVTOCI	HEDGING DERIVATIVES
Balance as at 1/1/2024	1,280	697	_	4
Additions				
Purchases	330	1,143	_	_
Realised gains ¹	116	10	_	_
Transfer from other levels	82	_	_	_
Other additions ²	5	4	_	_
Disposals				
Sales	(348)	(179)	_	_
Repayment	_	_	_	_
Realised losses ¹	(118)	(19)	_	(1)
Transfer to other levels	(43)	(30)	_	_
Other disposals	(6)	(4)	_	_
Balance as at 30/6/2024	1,298	1,622		3
Balance as at 1/1/2023	2,303	1,079		6
Additions				
Purchases	484	194	_	_
Realised gains ¹	82	44	_	_
Transfer from other levels	206	7	_	_
Other additions ²	6	8	_	_
Disposals				
Sales	(1,009)	(244)	_	(1)
Repayment	_	(100)	_	_
Realised losses ¹	(488)	(85)	_	(1)
Transfer to other levels	(278)	(198)	_	_
Other disposals	(26)	(8)	_	_
Balance as at 31/12/2023	1,280	697	_	4

¹ In the income statement and shareholders' equity.

The increase in Level 3 in the first half of the year is mainly due to the increase in financial assets at FVTPL and the transactions contained within them.

² Also including changes in the group of companies included in consolidation.

The following table shows the changes in the financial liabilities allocated to Level 3 in the fair value hierarchy:

€ millions	FINANCIAL LIABILITIES HELD FOR TRADING	FINANCIAL LIABILITIES AT FVTPL	HEDGING DERIVATIVES
Balance as at 1/1/2024	1,266	244	5
Additions			
Sales	326	_	_
Issues	_	_	_
Realised losses ¹	109	2	_
Transfer from other levels	167	287	_
Other additions ²	36	_	_
Disposals			
Buy-backs	(185)	(3)	_
Repayment	_	(1)	_
Realised gains ¹	(98)	(1)	(1)
Transfer to other levels	(273)	(81)	_
Other disposals	(17)	_	_
Balance as at 30/6/2024	1,331	447	4
Balance as at 1/1/2023	1,897	283	_
Additions			
Sales	148	_	_
Issues	165	101	_
Realised losses ¹	127	18	_
Transfer from other levels	275	22	5
Other additions ²	46	1	_
Disposals			
Buy-backs	(472)	(16)	_
Repayment	(30)	(56)	_
Realised gains ¹	(333)	(6)	_
Transfer to other levels	(540)	(101)	_
Other disposals	(17)	(2)	_
Balance as at 31/12/2023	1,266	244	5

¹ In the income statement and shareholders' equity.

The increase in Level 3 instruments within financial liabilities at FVTPL is largely due to net transfers from other levels that are primarily attributable to bonds and notes. These result from the regular review of the fair value levels determined and the materiality of individual non-observable parameters. A moderate increase was seen in financial liabilities held for trading in the first half of the year.

² Also including changes in the group of companies included in consolidation.

49 Fair values of financial instruments compliant with IFRS 7

The fair values are calculated using the market information available at the reporting date as well as specific company valuation methods.

	CARRYING A	MOUNT	FAIR VA	LUE
€ billions	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Assets				
Cash and cash balances	10.8	23.3	10.8	23.3
Financial assets held for trading	69.6	68.6	69.6	68.6
Financial assets at FVTPL	3.6	3.2	3.6	3.2
Financial assets at FVTOCI	12.6	9.3	12.6	9.3
Loans and receivables with banks (at cost)	22.1	19.6	21.9	19.7
Loans and receivables with customers (at cost)	159.2	154.5	156.5	152.9
of which finance lease receivables	0.3	0.4	0.3	0.4
Hedging derivatives	0.3	0.4	0.3	0.4
Total	278.2	278.9	275.3	277.4
Liabilities				
Deposits from banks	39.2	35.7	38.2	34.8
Deposits from customers	136.8	139.6	136.8	139.6
Debt securities in issue	33.5	34.3	31.4	32.5
Financial liabilities held for trading	48.7	48.5	48.7	48.5
Financial liabilities at FVTPL	4.2	4.7	4.2	4.7
Hedging derivatives	0.1	0.1	0.1	0.1
Total	262.5	262.9	259.4	260.2

	FAIR VALUE FAIR VALUE BASED ON OBSERVED ON VALUATION PARAMETERS AN ACTIVE MARKET OBSERVED ON THE MARKET (LEVEL 1) (LEVEL 2)		FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3)			
€ billions	30/6/2024	31/12/2023	30/6/2024	31/12/2023	30/6/2024	31/12/2023
Financial assets not carried at fair value in the balance sheet						
Cash and cash balances	_	_	10.8	23.3	_	-
Loans and receivables with banks (at cost)	5.1	4.0	14.9	14.8	1.9	0.9
Loans and receivables with customers (at cost)	14.0	11.7	52.3	58.3	90.2	82.9
of which finance leases	_	_	_	_	0.3	0.4
Financial liabilities not carried at fair value in the balance sheet						
Deposits from banks	_	_	28.2	24.6	10.0	10.2
Deposits from customers	_	_	133.5	134.6	3.3	5.0
Debt securities in issue	16.5	17.1	7.3	6.8	7.6	8.6

At HVB Group, the difference between the fair values and carrying amounts totals minus €2.9 billion for assets (previous year: minus €1.5 billion) and minus €3.1 billion for liabilities (previous year: minus €2.7 billion). The net balance of these amounts is €0.2 billion (previous year: €1.2 billion). When comparing the carrying amounts and fair values of hedged items, it should be noted that part of the hidden reserves/hidden liabilities has already been included in the hedge adjustment.

50 Disclosures regarding the offsetting of financial assets and liabilities

The following two tables separately show the recognised financial assets and financial liabilities that have already been netted in the balance sheet in accordance with IAS 32.42 together with the financial instruments that are subject to a legally enforceable master netting arrangement or similar arrangement but that do not satisfy the criteria for offsetting in the balance sheet.

Financial assets that are netted in the balance sheet or subject to a legally enforceable master netting arrangement or similar arrangement:

	<u> </u>						
				AMOUN	TS NOT RECOGNISED)	
€ millions	FINANCIAL ASSETS (GROSS)	FINANCIAL LIABILITIES NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED FINANCIAL ASSETS (NET)	EFFECTS OF MASTER NETTING ARRANGEMENTS	FINANCIAL INSTRUMENTS AS COLLATERAL	CASH COLLAT- ERAL	NET AMOUNT
Derivatives ¹	198,342	(154,153)	44,189	(30,306)	(419)	(6,324)	7,140
Reverse repos ²	14,656	(3,757)	10,899	_	(10,631)	_	268
Loans and receivables ³	78,981	(2,238)	76,743	_	_	_	76,743
Total as at 30/6/2024	291,979	(160,148)	131,831	(30,306)	(11,050)	(6,324)	84,151
Derivatives ¹	233,034	(186,710)	46,324	(30,422)	(318)	(7,853)	7,731
Reverse repos ²	10,706	(1,294)	9,412	_	(9,382)	_	30
Loans and receivables ³	76,911	(2,438)	74,473	_	_	_	74,473
Total as at 31/12/2023	320,651	(190,442)	130,209	(30,422)	(9,700)	(7,853)	82,234

¹ Derivatives are included in the balance sheet items "Financial assets held for trading" and "Hedging derivatives"

Financial liabilities that are netted in the balance sheet or subject to a legally enforceable master netting arrangement or similar arrangement:

				AMOUN	TS NOT RECOGNISED)	
€ millions	FINANCIAL LIABILITIES (GROSS)	FINANCIAL ASSETS NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED LIABILITIES (NET)	EFFECTS OF MASTER NETTING ARRANGEMENTS	FINANCIAL INSTRUMENTS AS COLLATERAL	CASH COLLAT- ERAL	NET AMOUNT
Derivatives ¹	196,890	(155,847)	41,043	(30,306)	(353)	(5,329)	5,055
Repos ²	19,345	(3,757)	15,588	_	(15,371)	_	217
Liabilities ³	103,171	(544)	102,627	_	_	_	102,627
Total as at 30/6/2024	319,406	(160,148)	159,258	(30,306)	(15,724)	(5,329)	107,899
Derivatives ¹	231,112	(188,435)	42,677	(30,422)	(367)	(5,591)	6,297
Repos ²	5,345	(1,294)	4,051	_	(3,911)	_	140
Liabilities ³	109,136	(713)	108,423	_	_	_	108,423
Total as at 31/12/2023	345,593	(190,442)	155,151	(30,422)	(4,278)	(5,591)	114,860

¹ Derivatives are included in the balance sheet items "Financial liabilities held for trading" and "Hedging derivatives".

² Reverse repos are covered in the Notes "Loans and receivables with banks (at cost)" and "Loans and receivables with customers (at cost)" They are also included in financial assets held for trading at an amount of €1,515 million (previous year: €1,237 million).

³ Only relates to current accounts, cash collateral or pledged credit balances and other loans and receivables (including cumulative variation margins), as covered in the Notes "Loans and receivables with banks (at cost)" and "Loans and receivables with customers (at cost)".

² Repos are covered in the Notes "Deposits from banks" and "Deposits from customers". They are also included in financial liabilities held for trading at an amount of €908 million (previous year: €198 million).

³ Only relates to current accounts, cash collateral or pledged credit balances and other liabilities (including cumulative variation margins), as covered in the Notes "Deposits from banks" and "Deposits from customers".

Compliant with IAS 32.42, financial assets and liabilities with the same counterparty are to be netted and the net amount recognised in the balance sheet if such netting of the amounts recognised at the present date is legally enforceable and the intention is to settle on a net basis during the normal course of business or to realise the asset and settle the liability simultaneously. The tables show a reconciliation from the gross amounts prior to netting via the offset amounts to the net amounts after netting for these offsets in the balance sheet. At HVB Group, the offsets in the balance sheet relate to transactions with central counterparties (CCPs), i.e. OTC derivatives (offset of positive and negative fair values that balance out at currency level) and the receivables and liabilities arising from reverse repos and repos concluded with the same central counterparty. At the same time, nettable receivables and liabilities repayable on demand with the same counterparties in the banking business are also offset in the balance sheet. In addition, cumulative changes in the fair value of derivatives on futures exchanges are netted with the cumulative variation margin payments.

The column "Effects of master netting arrangements" shows the financial instruments that are subject to a legally enforceable bilateral master netting arrangement or similar arrangement, but which are not netted in the balance sheet as they do not satisfy the IAS 32.42 netting requirements as described above. At HVB Group, this includes OTC derivatives and repo transactions with individual counterparties with which legally enforceable master netting arrangements have been concluded allowing an offset in the event of default.

In addition, collateral in the form of financial instruments and cash collateral pledged or received in this connection is presented in the tables. Furthermore, securities lending transactions shown off the balance sheet without cash collateral are not included in the above netting tables.

As part of credit risk management notably with regard to the counterparty risk arising from derivatives, netting arrangements are frequently concluded that, in the event of default by the counterparty, permit all derivatives with this counterparty to be netted and positive and negative fair values of the individual derivatives to be offset to create a net receivable. Such net receivables are normally secured by cash collateral to further reduce the credit risk. This involves the debtor of the net receivable transferring money to the creditor and pledging these cash balances. The amount of the cash collateral is adjusted at regular intervals to reflect the current amount of a potential net receivable, although a receivable from cash collateral provided can become a liability from cash collateral received and vice versa depending on the balance of the potential net receivable.

This cash collateral is shown separately as "Cash collateral and pledged credit balances" in the following notes: loans and receivables with banks (at cost), loans and receivables with customers (at cost), deposits from banks and deposits from customers.

51 Securities sale and repurchase and securities lending transactions by balance sheet item

	30/6/2	2024	31/12/2023		
€ millions	CARRYING AMOUNT	OF WHICH TRANSFERRED AS COLLATERAL	CARRYING AMOUNT	OF WHICH TRANSFERRED AS COLLATERAL	
Financial assets held for trading	69,625	4,239	68,611	2,694	
Financial assets at FVTPL	3,571	_	3,215	_	
Financial assets at FVTOCI	12,591	2,343	9,252	1,980	
Loans and receivables with banks (at cost)	22,139	_	19,566	_	
Loans and receivables with customers (at cost)	159,213	_	154,477	_	
Total	267,139	6,582	255,121	4,674	

52 Contingent liabilities and other commitments

€ millions	30/6/2024	31/12/2023
Contingent liabilities ¹	29,722	29,722
Financial guarantees (guarantees and indemnities)	29,722	29,722
Other commitments	107,972	106,044
Irrevocable and revocable credit commitments with default risk	107,967	106,039
Other commitments	5	5
Total	137,694	135,766

¹ Contingent liabilities are offset by contingent assets of the same amount.

In addition to irrevocable loan commitments, contingent liabilities from loan commitments also include revocable loan commitments, which are generally subject to credit default risk.

A contingent liability exists if an outflow of economic resources is possible (IAS 37.28). The contractual obligation to pay out under the loan commitment granted is irrelevant in this respect. With regard to revocable loan commitments, which are generally subject to credit default risk, such an outflow of funds is possible, as only this subsequently leads to credit default risk.

In previous years HVB made use of the option to provide up to 15% of the annual contribution to the bank restructuring fund in the form of fully secured payment claims (irrevocable payment commitments) in accordance with Section 12 of the German Bank Restructuring Fund Act (Restrukturierungsfondsgesetz - RStruktFG). These amount to €104 million at the reporting date (year-end 2023: €104 million). Cash collateral was provided for these, which is disclosed as loans and receivables with customers. No new irrevocable payment commitments were issued in the reporting period.

In previous years, HVB made use of the option to provide up to 30% of the annual contribution to the deposit guarantee scheme of German banks in the form of fully secured payment claims (irrevocable payment commitments) in accordance with Section 5a (10) of the German Statute of the Deposit Guarantee Scheme (Statut des Einlagensicherungsfonds – SESF). These amount to €22 million at the reporting date (year-end 2023: €22 million). Financial collateral was provided for these. No new irrevocable credit commitments were issued in the reporting period.

In previous years, HVB made use of the option to provide up to 30% of the annual contribution to the deposit guarantee scheme of German banks (Entschädigungseinrichtung deutscher Banken) in the form of fully secured payment claims (irrevocable payment commitments) in accordance with Section 19 of the German Regulation on Financing the Deposit Guarantee Scheme (Entschädigungseinrichtungs-Finanzierungsverordnung – EntschFinV). These amount to €39 million at the reporting date (year-end 2023: €39 million). Financial collateral was provided for these. No new irrevocable credit commitments were issued in the reporting period.

Contingent liabilities payable to related parties

€ millions	30/6/2024	31/12/2023
Non-consolidated affiliates	2,083	1,947
of which:		
UniCredit S.p.A.	1,411	1,335
sister companies	671	611
subsidiaries	1	1
Joint ventures	_	_
Associates	_	_
Other investees	74	106
Total	2,157	2,053

53 Information on relationships with related parties

Besides the relationships with consolidated affiliates, there are a number of transactions involving UniCredit S.p.A. and other affiliated but not consolidated UniCredit companies as a result of the integration of HVB Group into the UniCredit corporate group. The quantitative information in this regard can be found in the notes to the income statement and the notes to the balance sheet.

Within the UniCredit corporate group, HVB has been assigned the role of the group-wide centre of competence for the group-wide hedging of derivative positions of other members of the group. In this role, HVB acts as counterparty for derivative transactions conducted by UniCredit companies, among other things. For the most part, this involves hedging derivatives that are externalised on the market via HVB. Information regarding the exposure to UniCredit and its subsidiaries is provided in the notes to the respective balance sheet item.

Like other affiliates, HVB has outsourced IT activities to UniCredit S.p.A., a company that is affiliated with the Bank. The goal is to exploit synergies and enable the Bank to offer fast, high-guality IT services by means of a service level agreement. HVB incurred expenses of €256 million for these services in the reporting year (previousyear period: €246 million). This was offset by income of €10 million from services rendered and internal charges (previous-year period: €5 million). Moreover, software products worth €0.3 million were purchased from UniCredit S.p.A. (previous-year period: €0.3 million).

Furthermore, HVB Group has transferred certain back office activities to UniCredit S.p.A. In this context, the latter provides settlement services for HVB and other affiliates in line with a standard business and operating model. HVB Group incurred expenses of €13 million for these services including restructuring costs in the reporting period (previous-year period: €23 million).

Members of the Executive Board, Supervisory Board and Group Executive Committee of UniCredit S.p.A. and their respective immediate family members are considered related parties of HVB.

Loans and advances made to, and contingent liabilities and liabilities assumed for, related parties at the reporting date were as follows:

	30/6/2024				31/12/2023			
€ thousands	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ²	LIABILITIES	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ²	LIABILITIES		
Members of the Executive Board and their related parties	1,526	68	2,154	1,560	75	3,263		
Members of the Supervisory Board and their related parties	3,342	35	5,611	2,933	486	3,091		
Members of the Group Executive Committee ¹ and their related parties	_	_	_	_	_	21		
Companies controlled by the persons listed above	_	_	_	_	_	_		

¹ Excluding members of the Executive Board and Supervisory Board of UniCredit Bank GmbH.

Mortgage loans were granted to members of the Executive Board and the Supervisory Board as well as their immediate family members at interest rates of between 0.35% and 3.95% falling due in the period from 2024 to 2049. Furthermore, a KomfortKredit loan was granted at an interest rate of at 2.945%, a credit line was drawn on at 3.075% and there was an overdraft at an interest rate of 10%.

All banking transactions involving the group of people listed were conducted at customary market terms with the usual collateral.

² Irrevocable and revocable lending commitments are shown under contingent liabilities.

54 Members of the Supervisory Board¹

Andrea Orcel Chairman

Florian Schwarz **Deputy Chairmen**

Dr Bernd Metzner

Dr Michael Diederich **Members**

Sabine Eckhardt

Dr Claudia Mayfeld

Fiona Melrose

Sonia Nassar since 17 June 2024

Claudia Richter

Thomas Schöner until 30 April 2024

Oliver Skrbot

Christian Staack

Gregor Völkl

1 As at 30 June 2024.

55 Members of the Executive Board¹

Marion Höllinger Spokeswoman of the Executive Board (CEO)

until 29 February 2024 People & Culture (including Labour and Social Affairs pursuant

to Section 27 (2) 2 MgVG)

René Babinsky since 1 March 2024 **Head of Private Clients**

Artur Gruca Chief Digital & Operating Officer (CDOO)

Marco lannaccone since 1 April 2024

Head of Client Solutions

Dr Jürgen Kullnigg until 31 March 2024

Chief Risk Officer (CRO)

Jan Kupfer until 30 June 2024 **Head of Corporates**

Georgiana Lazar-O'Callaghan

since 1 March 2024

Head of People & Culture

since 1 March 2024 People & Culture (including Labour and Social Affairs pursuant to

Section 27 (2) 2 MgVG)

Pierpaolo Montana since 1 April 2024

Chief Risk Officer (CRO)

Monika Rast

until 29 February 2024

Head of Private Clients Germany

Ljubisa Tesić

Chief Financial Officer (CFO)

1 As at 30 June 2024.

Responsibility Statement by the Executive Board

To the best of our knowledge, and in accordance with the applicable reporting principles for interim financial reporting, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Interim Management Report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group for the remaining months of the financial year.

Munich, 6 August 2024

UniCredit Bank GmbH
The Executive Board

René Babinsky

Marion Bayer-Schiller

Martin Brinckmann

Artur Gruca

Marco lannaccone

Marion Höllinger

Georgiana Lazar-O'Callaghan

Pierpaolo Montana

Ljubisa Tesić

Contacts

Should you have any questions about the annual report or our half-yearly financial report, please contact Media Relations by calling +49 (0)89 378-25801,

You can call up important company announcements as soon as they have been published by visiting our website at www.hvb.de

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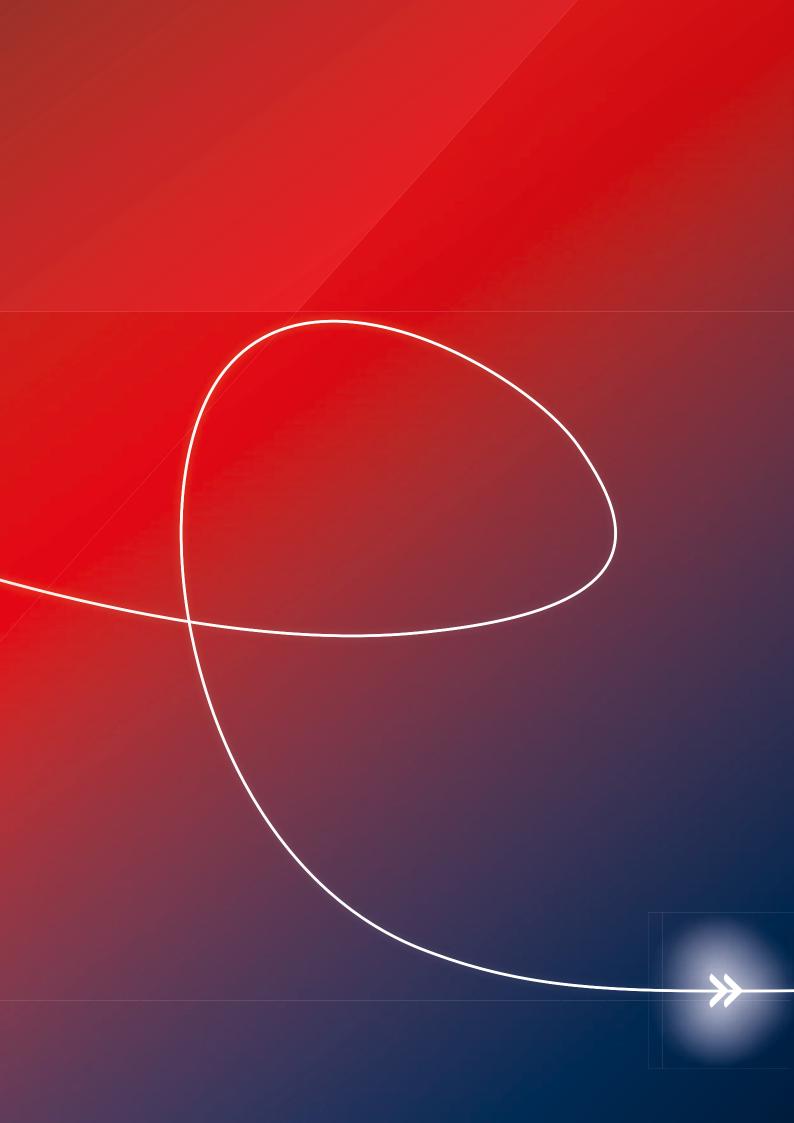
Our Annual and Half-yearly Financial Reports can be found in German and English at: www.hvb.de \rightarrow Über uns \rightarrow Berichte

Published by:

UniCredit Bank GmbH Head Office D-81925 Munich www.hvb.de

Registrar of companies: Munich HRB 421 48 Cover and creative definition: UniCredit S.p.A.

Design, graphic development and production: UniCredit S.p.A. Typesetting: Serviceplan Make GmbH & Co. KG, Munich



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