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2022 Half-yearly Financial Report as at <u>30 June 2022</u>

Empowering Communities to Progress.



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.

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Financial Highlights

Key performance indicators

	1/1-30/6/2022	1/1-30/6/2021
Net operating profit	€943m	€716m
Cost-income ratio (based on operating income)	59.3%	67.7%
Profit before tax	€939m	€617m
Consolidated profit	€751m	€358m
Earnings per share	€0.94	€0.45

Balance sheet figures/Key capital ratios

	30/6/2022	31/12/2021
Total assets	€342,016m	€312,193m
Shareholders' equity	€19,209m	€17,790m
Common Equity Tier 1 capital ¹	€15,750m	€15,167m
Core capital (Tier 1 capital) ¹	€17,450m	€16,867m
Risk-weighted assets (including equivalents for market risk and operational risk)	€80,978m	€86,928m
Common Equity Tier 1 capital ratio ^{1,2}	19.4%	17.4%
Core capital ratio (Tier 1 ratio) ^{1,2}	21.5%	19.4%
Leverage ratio in accordance with Commission Delegated Regulation ^{1,3}	4.8%	5.3%

1 31 December 2021: in accordance with approved financial statements.

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. Article 500b CRR II introduced through Regulation (EU) 2020/873 "Temporary exclusion of certain exposures to central banks from the total exposure measure in view of the COVID-19 pandemic" was applied to determine the leverage ratio of HVB Group at 30 June 2021. Had the aforementioned article not been applied, the leverage ratio of HVB Group as at 31 December 2021 would amount to 4.9% (31 December 2020 in accordance with approved consolidated financial statements: 4.4%).

	30/6/2022	31/12/2021
Employees (in FTEs)	10,876	11,406
Branch offices	448	461

Ratings

	LONG-TERM	SHORT-TERM	OUTLOOK		CHANGE/ CONFIRMATION
Fitch Ratings					
Bank Ratings					
Derivative Counterparty Rating	A– (dcr)	_	_		3/5/2022
Deposit Rating	A-	F2			3/5/2022
Issuer Default Rating	BBB+	F2	negative		3/5/2022
Stand-alone Rating	_	_	_	bbb+	3/5/2022
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Preferred Debt Issuance Programme	A–	F2	_		3/5/2022
Non-preferred Senior Unsecured Debt	BBB+	_	_		3/5/2022
Subordinated Debt	BBB-	_			3/5/2022
Moody's					
Bank Ratings					
Counterparty Rating	A1	P-1	—		17/5/2021
Deposit Rating	A2	P-1	stable		17/5/202
Issuer Rating	A2	—	stable		17/5/202
Stand-alone Rating	—	—	—	baa2	17/5/202
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Unsecured	A2	_	stable		17/5/2021
Non-preferred Senior Unsecured Debt/ Junior Senior Unsecured	Baa2	_	—		13/7/2021
Subordinated Debt	Baa3	_	_		17/5/202
Issue Ratings (secured)					
Public Sector Covered Bonds	Aaa	—	—		23/6/2015
Mortgage Covered Bonds	Aaa	—	—		23/6/2015
Standard & Poor's					
Bank Ratings					
Resolution Counterparty Ratings	A–	A-2			25/2/2022
Issuer Credit Rating	BBB+	A-2	negative		25/2/2022
Stand-alone Rating				bbb+	25/2/2022
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Unsecured	BBB+	—	—		25/2/2022
Non-preferred Senior Unsecured Debt/ Senior Subordinated	BBB	_	_		25/2/2022
Subordinated Debt	BBB-	_	_		25/2/2022

Financial Review

Corporate structure

Legal corporate structure and organisation of management and control

In the first half of 2022, the legal corporate structure and the organisation of management and control remained unchanged compared with year-end 2021. Please refer to the "Corporate structure" section of Management's Discussion and Analysis in 2021 for statements in this connection.

The following changes occurred in the members of the Supervisory Board in the first half of 2022: Professor Dr Annette G. Köhler resigned from the Supervisory Board as shareholder representative with effect from the end of 28 February 2022. In her place, Ms Sabine Eckhardt was elected as member of the Supervisory Board with effect from 1 March 2022 at the Extraordinary Shareholders' Meeting of UniCredit Bank AG on 24 February 2022.

There were no changes in the members of the Management Board in the first half of 2022.

The members of the Supervisory Board and Management 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 Management Board".

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 first half of 2022.

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 2022 ²	Full year 2021	Main drivers of development in the first half of 2022 ³
Global economy	3,0%4	6.1%	Soaring energy costs and inflation rates have weighed heavily on companies and private households. In addition, there are ongoing disruptions in supply chains and geopolitical risks. These factors have resulted in a slowdown in the economy.
Eurozone countries including:	4.7%	5.3%	The eurozone also saw a contraction in the economy, although the momentum was still comparatively strong. A supportive factor in this connection was the pandemic-related revival in demand for services.
Germany	2.5%	2.6%	In Germany, the increase in demand for services also helped to dampen the negative effects of higher energy costs, inflation and ongoing supply bottlenecks.
USA	2.6%	5.7%	In the USA, higher energy costs and inflation are also weighing on the economy. In addition, interest rates have increased, which has already led to a slowdown in activities in the real estate market.

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 2022 on the basis of estimated figures.

4 Source: full year value expected by UniCredit Research (figures for first half of 2022 are not available).

Sector-specific developments

Several pandemic-related regulatory easing measures from 2020 were reversed in 2021. While the focus was on the repercussions of the COVID-19 pandemic in 2020, 2021 was characterised by economic recovery and less volatile markets. However, the first half of 2022 was marked by increasing geopolitical risks.

Banks, regarded in the pandemic as part of the solution, helped to stabilise economic development by granting loans. In contrast to previous crises, there was no highly pro-cyclical tightening of banks' lending policies during the COVID-19 pandemic, mainly due to an expansionary monetary policy and government support measures.

At its meeting in February 2022, the ECB confirmed all current measures, but indicated an accelerated exit from quantitative easing and the start of interest rates returning to normal, which led to a further significant increase in the level of interest rates. In March 2022, the ECB announced that it would be gradually lowering the monthly net asset purchases under its asset purchase programme (APP) for the second guarter from €40 billion in April to €30 billion in May and to €20 billion in June. In April 2022, the ECB finally announced the end of the net purchases under the APP as of July 2022. The ECB also ended the net purchases under its temporary purchasing programme (PEPP) on 1 July 2022. However, the ECB will now reinvest all PEPP maturities until at least the end of 2024. The ECB also announced that it would be reinvesting PEPP maturities flexibly by asset class and region. The programme contains government and private assets and its upper limit has been raised several times, the last time to a total volume of €1.85 trillion. By the end of June 2022, the ECB had already purchased assets totalling €1.7 trillion under the PEPP.

Financial Review (CONTINUED)

At its meeting in July 2022, the ECB finally announced an interest rate hike by 50 basis points, which was higher than its previous announcement of only 25 basis points. A further data-dependent hike is planned in September 2022. Due to the increase in credit spreads for the government bonds of peripheral countries, the ECB convened an ad hoc meeting on 15 June 2022 to discuss possible instruments for combating fragmentation. In July, the ECB also provided details on the new Transmission Protection Instrument (TPI). The ECB's Governing Council considers it necessary to establish the TPI to support the effective transmission of monetary policy. The TPI will supplement the ECB Council's raft of instruments and can be activated to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the euro area.

The temporary easing of the criteria for collateral relating to the refinancing of commercial banks with the ECB was extended from September 2021 to 2022. In March 2022, however, the ECB decided to phase out the easing measures by 2024. This package of measures served to cushion the stricter financing conditions in the eurozone and is leading to a temporary increase in risk tolerance within the euro system to support lending to the economy. Specifically, the following collateral was relaxed for ECB refinancing: loan receivables may be used as collateral, valuation discounts for collateral were reduced and the effects of credit rating downgrades on the availability of collateral were temporarily mitigated.

On the regulatory side, there were comprehensive easing measures in the course of the pandemic to support bank lending to the real economy. On 10 February 2022, the ECB announced that it would be gradually phasing out the easing measures taken in respect of capital requirements. Banks can now temporarily allow their capital ratios to fall below Pillar 2 Guidance (P2G) and reduce their capital conservation buffer until at least the end of 2022. However, full compliance with capital requirements is expected again from 2023. As regards the calculation of the leverage ratio, banks were allowed to exclude exposures vis-à-vis central banks from their leverage ratio until the end of March 2022. As regards macroprudential regulation, the German Federal Financial Supervisory Authority (BaFin) decided in January to increase the countercyclical capital buffer from 0.0 percent at present to 0.75 percent of risk-weighted assets on domestic risk positions. Banks must apply this buffer rate from 1 February 2023 to calculate the bank-specific countercyclical capital buffer. Furthermore, BaFin has also proposed a sectoral systemic risk buffer of 2.0 percent of risk-weighted assets on loans collateralised by residential real estate, which is also to be observed from 1 February 2023. This will lead to a further increase in capital requirements for banks.

At the end of March 2020, the Basel Committee on Banking Supervision had already postponed the introduction of the finalised Basel III standard (also widely known as Basel IV standard) from 2022 to 2023 on account of the pandemic. In October 2021, the EU Commission presented its draft for implementing the finalised Basel III standard, according to which it is not to be introduced until 2025. The banking package is likely to be adopted by the beginning of 2023. Furthermore, there are special regulations with long transitional periods for risk positions vis-à-vis companies without an external credit rating and housing loans collateralised by real estate. Nevertheless, the risk weights will increase significantly step by step from 2025.

With regard to MREL, the Single Resolution Board (SRB) is adhering to its original MREL timetable despite the COVID-19 pandemic. Banks must meet the respective MREL interim targets for the beginning of 2022. The final requirements are to be implemented by the beginning of 2024. Overall, the banks are well on track and have already met the MREL targets to a large extent.

Risk premiums in the European credit market widened significantly in the first half of 2022 as a result of geopolitical risks, persistently high inflation, an ever greater risk of recession and uncertainty about gas supplies in Europe. An end of the ECB's net bond purchases also led to a widening of credit spreads. The credit spreads of companies with good credit ratings rose by 63 basis points to a level of 90 basis points in the first half of 2022. Risk premiums for senior bank bonds followed a similar trend, increasing by 90 basis points to 112 basis points in the first half of 2022. The spread between risk premiums for ten-year Italian sovereign bonds and ten-year German sovereign bonds likewise widened significantly from 135 basis points to 242 basis points in the first half of the year. The ECB's announcement that it was preparing an instrument to combat fragmentation and the flexibility in reinvesting maturities in the PEPP supported investor confidence after which the spread margin fell back below 200 basis point mark.

The yield curve moved upwards in the first half of the year and has become slightly steeper. The three-month Overnight Index Swap (OIS) ESTR rate increased significantly from negative 57 basis points to negative 26 basis points and the 10-year Overnight Index Swap (OIS) ESTR rate rose from 12 basis points at the beginning of 2022 to plus 189 basis points by the end of June 2022. A steeper yield curve is generally positive for the profitability of maturity transformation for banks. Furthermore, the market is currently pricing in further ECB rate hikes due to the high inflation and the current market expectation is that the ECB deposit rate will increase from currently minus 50 basis points to 1.4 percent by mid-2023.

The trend on equity markets in the first half of 2022 reflected the greater uncertainty. The Euro STOXX 50 was down by 20 percent in the first six months of 2022. Bank shares mirrored the development of the overall market and the EURO STOXX Banks (Price) Index was also down by 20 percent in the same period. However, after Russia invaded Ukraine in February 2022, bank shares fell disproportionately to the overall market following a good start to the year.

In the USA, the yield on ten-year US treasury bonds rose significantly from 1.5 percent at the end of 2021 to more than 3.0 percent at the end of June 2022. The US Federal Reserve Bank began to raise interest rates as early as March 2022. The yield on ten-year bonds of the Federal Republic of Germany increased from minus 18 basis points in 2022 to 134 basis points by the end of June 2022. In 2022, the 3-month Euribor was up from minus 57 basis points to minus 20 basis points by the end of June 2022 and even rose to above the zero mark in July 2022. In the first half of 2022, the euro depreciated against the US dollar, partly as a result of a more rapid rate hike by the FED and a greater risk for the European economy as a result of the war in Ukraine.

The topic of sustainability continued to gain importance for the banking sector. On the one hand, the share of ESG-compliant issues in the banking sector remained at a high level with more than 20 percent of the bonds issued in the banking sector in the first half of 2022 already being aligned with ESG standards. On the other hand, there were several new regulations relating to sustainability. In April 2021, the European Commission adopted an extensive package of sustainability measures, including the first two delegated acts on the EU taxonomy to mitigate climate change and adapt to existing climate change. These technical criteria determine which economic activities make a significant contribution to climate protection or to adapting to climate change. In July 2022 and after lengthy discussions, the European Parliament finally agreed to classifying investments in natural gas and nuclear power as sustainable under certain conditions.

Financial Review (CONTINUED)

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 our income statement.

	1/1-30/6/2022	1/1-30/6/2021		CHAN	GE
INCOME/EXPENSES	€ millions	€ millions	€m	illions	in %
Net interest	1,291	1,167	+	124	+ 10.6
Dividends and other income from equity investments	23	16	+	7	+ 43.8
Net fees and commissions	607	581	+	26	+ 4.5
Net trading income	340	423		(83)	(19.6)
Net gains/(losses) on financial assets and liabilities at fair value	141	44	+	97	>+ 100.0
Net gains/(losses) on derecognition of financial instruments measured at cost	6	(1)	+	7	
Net other expenses/income	(164)	(116)		(48)	+ 41.4
of which net valuation/disposal of investment properties	2	13		(11)	(84.6)
OPERATING INCOME	2,244	2,114	+	130	+ 6.1
Payroll costs	(694)	(733)	+	39	(5.3)
Other administrative expenses	(590)	(641)	+	51	(8.0)
Amortisation, depreciation and impairment losses on intangible					
and tangible assets	(46)	(58)	+	12	(20.7)
Operating costs	(1,330)	(1,432)	+	102	(7.1)
OPERATING PROFIT/(LOSS)	914	682	+	232	+ 34.0
Net write-downs of loans and provisions for guarantees and commitments	29	34		(5)	(14.7)
NET OPERATING PROFIT/(LOSS)	943	716	+	227	+ 31.7
Provisions for risks and charges	9	(88)	+	97	
Restructuring costs	(9)	_		(9)	
Net gains/(losses) on disposals of investments	(4)	(11)	+	7	(63.6)
PROFIT/(LOSS) BEFORE TAX	939	617	+	322	+ 52.2
Income tax for the period	(188)	(259)	+	71	(27.4)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	751	358	+	393	>+ 100.0
attributable to the shareholder of UniCredit Bank AG	751	358	+	393	>+ 100.0
attributable to minorities		_		_	_

Net interest

In the reporting period, net interest came to \leq 1,291 million compared with \leq 1,167 million in the previous-year period and was thus a significant \leq 124 million or 10.6% higher than the previous-year figure. Net interest in the reporting period also includes effects from a reversal of a provision for interest on tax payments of \leq 42 million in connection with the reduction in statutory interest on tax refunds and payments of tax arrears from 6% to 1.8%. The previous-year period did not include any tax-related, extraordinary items.

The Retail and Corporates operating segments benefited from an improvement in the interest environment in the deposit-taking business in particular and in negative interest rates being passed on to customers to a greater extent compared with the previous period. Higher lending volumes also had a positive effect on net interest in the Corporates operating segment. In addition, the participation in the ECB's TLTRO III programme had a positive impact on net interest.

Dividends and other income from equity investments

Dividends and other income from equity investments totalled \in 23 million in the reporting period, representing a sharp increase of \in 7 million. The increase over the previous-year period is primarily due to higher dividends and similar income while the income from equity investments fell sharply. In the previous-year period, the sale of divisions of Comtrade B.V., an associate accounted for using the equity method, had a positive effect.

Net fees and commissions

In the reporting period, net fees and commissions came to €607 million and are thus a marked €26 million or 4.5% higher than in the previous-year period. The main reason for the higher net fees and commissions is a significant increase in income from payments as well as a substantial rise in income from the placement of structured products.

Net trading income

In the reporting period, net trading income was down a sharp €83 million, or 19.6%, to €340 million.

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 €53 million (previous-year period: €157 million).

In addition, losses entailed in the closing of derivatives exposures totalling €94 million to Russian banks, which are due to the sanctions against Russia, weighed on net trading income.

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

A net gain of ≤ 141 million is reported for financial assets and liabilities at fair value in the reporting period, which is a sharp ≤ 97 million higher than the gain of ≤ 44 million reported in the previous-year period.

There was a significant increase of €244 million in hedge accounting effects (previous-year period: €44 million). In the reporting year, a loss of €75 million was generated in financial liabilities designated at FVTPL compared with a gain of €22 million in the previous-year period. The loss of €32 million in financial assets mandatorily at FVTPL in the previous-year period rose sharply to €43 million in the reporting year. In addition, income of €16 million (previous-year period: €1 million) was generated from the derecognition from other comprehensive income in the reporting period. The fair value measurement of equity instruments with a negative amount of €1 million is also included in this item (previous-year period: €9 million).

Financial Review (CONTINUED)

Net other expenses/income

The item "Net other expenses/income" shows a net expense of \in 164 million for the reporting period, representing a sharp increase of \in 48 million over the net expense of \in 116 million in the previous-year period. The change is due in particular to the increase of \in 48 million to \in 241 million in the bank levy.

At €241 million in the reporting period (previous-year period: €193 million), the bank levy is the largest single item contained in net other expenses/income. The increase in the bank levy is partly due to the general increase in deposits (basis of assessment for the bank levy) and the expansion of HVB's balance sheet as a further factor influencing the amount set for the bank levy.

Operating costs

Operating costs totalled €1,330 million in the reporting period and were thus a marked €102 million or 7.1% lower than the previous-year's figure of €1,432 million. This shows that HVB Group has succeeded in reducing costs in line with the UniCredit Unlocked 2022-24 multi-year plan.

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 €914 million in the reporting period and thus rose sharply by €232 million over the previous-year figure of €682 million. The rise in operating income is primarily due to the increase of €124 million in net interest with the decline of €102 million in operating costs also having a positive effect. The changes in other operating income offset each other to a large extent.

The cost-income ratio (ratio of operating costs to operating income) thus improved to 59.3% in the reporting period after 67.7% in the previous-year period.

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

In the reporting period, net income from the reversal of net writedowns of loans and provisions for guarantees and commitments totalled €29 million after €34 million in the previous-year period, representing a significant decline of €5 million or 14.7%. The individual effects that offset each other are described below.

In the reporting period, a net amount of €31 million was allocated to portfolio allowances following a net reversal of €10 million in the previous-year period. In the reporting period, the macroeconomic factors were first adjusted to reflect the deterioration in the economic environment, which led to an allocation to portfolio allowances. In addition, the risks entailed in problems with supply chains, the impact of higher energy costs on companies coupled with the scenario of a halt in gas supplies were taken into account in particular. There was also an allocation to portfolio allowances of €43 million for UniCredit group companies based in Russia. The positive development in portfolios due to the initial recovery in economic activities as well as the adjustment made to model parameters had a counteracting effect in the first half of 2022, as the feared negative wave of defaults due to the COVID-19 pandemic has not occurred to date. In the previous-year period, there were net reversals of €10 million in portfolio allowances, although effects from the adjustment of macroeconomic factors and of model parameters offset each other for the most part in the first half of 2021.

In the reporting period, there was a net reversal of €60 million in specific valuation allowances after a net reversal of €24 million in the previous-year period. Allocations to specific valuation allowances on account of defaults were more than compensated for by reversals of existing specific valuation allowances in the first half of 2022. The expected wave of COVID-19-related defaults has not occurred to date. The result (net reversal) was attributable to the reversal of existing specific valuation allowances also in the previous-year period.

Provisions for risks and charges

In the reporting period, net income of €9 million was generated from the reversal of provisions. This is offset by net expenses of €88 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 whereas in the previous-year period an amount of €69 million related to a provision set aside for penalty payments to the EU Commission, which imposed these in the second quarter for cartel law infringements in connection with EU government bonds.

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

In the reporting period, HVB Group generated profit before tax of €939 million, which is a sharp €322 million or 52.2% higher than the profit before tax of €617 million generated in the previous-year period. At €914 million, operating profit (before net write-downs of loans and provisions for guarantees and commitments) is also significantly higher than the previous-year figure of €682 million, which is primarily due to higher net interest and lower operating costs. Compared with €34 million in the previous-year period, net write-downs of loans and provisions for guarantees and commitments at €29 million in the reporting period remained largely unchanged on the back of net income from the reversal of impairments. At €943 million, net operating profit was thus up by €227 million over the previous-year period. In addition, the sharp decline of €88 million in provisions for risks and charges in the previous-year period to a net amount of €9 million from reversals in the reporting period led to a further improvement in the results. Profit before tax thus rose sharply by €322 million to €939 million.

The income tax expense amounted to €188 million in the reporting period and was therefore a substantial €71 million or 27.4% lower than the income tax expense of €259 million in the previous-year period. While the sharp increase in profit before tax has tended to lead to a higher tax expense, the prospective adjustment and extension of the model calculation for the period in order to take account of the period of time in which taxable income will be generated for the purpose of the recognition of deferred taxes has resulted in tax income recognised in profit or loss of €131 million.

After deducting income tax for the period, HVB Group generated a consolidated profit of \notin 751 million in the reporting period, which represents a significant increase of \notin 393 million or 109.8% compared with the consolidated profit of \notin 358 million in the previous-year period.

Return on allocated capital

The profitability ratio return on allocated capital (RoAC) shows the annualised consolidated profit of HVB Group (attributable to the HVB shareholder) 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 year, this ratio rose to 12.9% compared with 5.8% in the previous year.

Financial Review (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. The segment structure was adjusted in the first half of 2022. The changes are also described in that section. When calculating totals, minor deviations might occur as a result of rounding.

		(€ millions)
OPERATING INCOME	1/1-30/6/2022	1/1-30/6/2021
Retail	634	611
Corporate	1,708	1,527
Other	209	113
Total	2,551	2,251

		(€ millions)
NET OPERATING PROFIT/(LOSS)	1/1-30/6/2022	1/1-30/6/2021
Retail	132	74
Corporate	1,022	787
Other	87	51
Total	1,241	912

		(€ millions)
PROFIT/(LOSS) BEFORE TAX	1/1-30/6/2022	1/1-30/6/2021
Retail	121	44
Corporate	777	514
Other	84	52
Total	982	610

		(€ millions
CONSOLIDATED PROFIT/(LOSS)	1/1-30/6/2022	1/1-30/6/2021
Retail	93	28
Corporate	568	290
Other	71	33
Total	732	351

Financial situation Total assets

The total assets of HVB Group rose by €29.9 billion, or 9.6%, to €342.0 billion as at 30 June 2022 compared with 31 December 2021.

On the assets side, cash and cash balances increased sharply, totalling €51.7 billion as at 30 June 2022 compared with €27.7 billion as at year-end 2021. This rise is almost exclusively due to higher credit balances with central banks, which were up from €21.7 billion in the previous year to €45.7 billion as at 30 June 2022, while cash on hand, at €6 billion, remained almost unchanged.

By contrast, financial assets held for trading fell slightly by €1.1 billion to €84.8 billion as at 30 June 2022 compared with €85.9 billion at year-end 2021, mainly on account of the decrease in other financial assets held for trading (down €5.9 billion), equity instruments (down €1.9 billion) and fixed-income securities (down €1.0 billion). A development in the opposite direction was seen in the positive fair values of derivative instruments (up €7.7 billion).

The portfolio of financial assets at FVTPL, which consists mainly of securities, fell sharply by €1.3 billion to €6.2 billion compared with year-end 2021. This decline is primarily due to securities reaching final maturity.

Financial assets at FVTOCI, which consists exclusively of securities, declined sharply by €1.7 billion to €10.3 billion compared with the previous year. This decline is primarily due to securities reaching final maturity.

Loans and receivables with banks rose sharply by €6.1 billion to €30.8 billion, which is largely attributable to increases of €6.9 billion in reverse repos, €1.1 billion in current accounts and €0.5 billion in securities. By contrast, there were decreases of €1.5 billion in other loans to banks and €0.9 billion in cash collateral.

Loans and receivables with customers were up slightly by €3.8 billion to €152.4 billion, mainly due to increases in current accounts (up €2.1 billion), mortgage loans (up €1.5 billion), cash collateral (up €0.9 billion) and securities (up €0.6 billion). This rise was offset by decreases in other loans and receivables (down €1.1 billion) and finance lease receivables (down €0.2 billion).

On the liabilities side, the item "Deposits from banks" rose a substantial $\in 8.8$ billion to $\notin 70.6$ billion. This rise is attributable to the increases in cash collateral (up $\notin 2.5$ billion), deposits from central banks (up $\notin 2.4$ billion), current accounts (up $\notin 1.4$ billion), other liabilities (up $\notin 1.3$ billion) and term deposits (up $\notin 1.2$ billion).

There was a significant increase of $\in 15.8$ billion to $\in 150.1$ billion in deposits from customers, driven largely by the higher volumes of current accounts (up $\in 15.3$ billion) and term deposits (up $\in 3.5$ billion). This increase was offset by cash collateral (down $\in 2.1$ billion) and repos (down $\in 0.7$ billion).

Compared with year-end 2021, there was a slight decrease in debt securities in issue from $\notin 0.7$ billion to $\notin 31.5$ billion. These primarily serve to fund the medium- to long-term lending business. As a result of the stable development in the lending business and in view of the Bank's good liquidity position, the volume has hardly changed, which is reflected in a slight decrease.

Financial liabilities held for trading rose a sharp €10.1 billion to €63.7 billion compared with year-end 2021. An amount of €10.8 billion of this increase is attributable to the negative fair values from derivative financial instruments, whereas other financial liabilities held for trading were down by €0.7 billion. Financial liabilities at FVTPL decreased significantly by €0.6 billion to €4.9 billion as at 30 June 2022 compared with €5.5 billion as at year-end 2021. These primarily serve to fund the medium- to long-term lending business. As a result of the stable development in the lending business and in view of the Bank's good liquidity position, the volume has hardly changed, which is reflected in the decrease mentioned.

Shareholders' equity shown in the balance sheet rose a substantial €1.4 billion to €17.5 billion as at the reporting date. This rise was supported by consolidated profit of €0.7 billion and other comprehensive income of €0.9 billion. However, the UniCredit-internal dividend payment of €0.2 billion for 2021 must be taken into account.

Further and more detailed information on the individual items of 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 amounted to \notin 90.7 billion at the reporting date compared with \notin 86.1 billion at year-end 2021. This figure includes contingent liabilities in the form of financial guarantees of \notin 30.3 billion (year-end 2021: \notin 28.1 billion) and other commitments of \notin 60.4 billion (year-end 2021: \notin 58.0 billion) almost exclusively related to irrevocable credit commitments. These contingent liabilities are offset by contingent assets of the same amount.

Financial Review (Continued)

Risk-weighted assets, key capital ratios and leverage ratio of HVB Group

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 €81.0 billion as at 30 June 2022 and were thus €5.9 billion lower than as at year-end 2021 (€86.9 billion). This is mainly due to the risk-weighted assets for credit risk (including counterparty default risk), which fell by €4.8 billion to €64.0 billion. Furthermore, the risk-weighted asset equivalents for operational risk decreased by €0.9 billion to €7.9 billion. The risk-weighted assets for market risk fell by €0.2 billion and came to €9.1 billion.

As at 30 June 2022, Common Equity Tier 1 capital compliant with the CRR II excluding hybrid capital (CET1 capital) totalled \in 15.8 billion and Tier 1 capital \in 17.5 billion. Tier 1 capital rose compared with year-end 2021 (\in 16.9 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 19.4% and 21.5% respectively as at 30 June 2022 (31 December 2021: 17.4% and 19.4% respectively). Own funds came to \in 18.8 billion as at 30 June 2022 (31 December 2021: \in 18.3 billion in accordance with approved consolidated financial statements). The own funds ratio was 23.2% as at 30 June 2022 (31 December 2021: 21.0%). The increase in the ratios is attributable to the decrease in risk-weighted assets and the increase in capital.

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 amounted to 4.8% as at 30 June 2022 (31 December 2021 in accordance with approved consolidated financial statements: 5.3%). Article 429a (1) n) CRR II on the temporary exclusion of certain exposures to central banks from the total exposure measure was applied to determine the leverage ratio of HVB Group as at 31 December 2021. If the aforementioned article had not been applied, the leverage ratio of HVB Group as at 31 December 2021 would amount to 4.9%. The aforementioned article was not applied as at 30 June 2022.

Ratings

HVB's credit rating is assessed by Moody's Investors Service Inc. (Moody's), Fitch Ratings Limited (Fitch) and Standard & Poor's Credit Market Services Europe Limited (S&P).

The ratings of countries and banks are subject to constant monitoring by rating agencies.

The first half of 2022 was overshadowed by the conflict between Russia and Ukraine in addition to the development of the COVID-19 pandemic. The global effects and impact of the conflict cannot yet be fully assessed at the present time. Initial economic consequences have already been seen in higher commodity prices and tougher trading conditions. In addition, the unfolding of the COVID-19 pandemic resulted in further restrictions and bottlenecks such as in interrupted supply chains. The rating agencies continue to closely monitor developments in these areas.

Despite recent economic developments HVB's ratings remain unchanged and were affirmed by Moody's on 17 May 2021. HVB's issuer rating and the rating for senior unsecured debt instruments are 'A2'/'P-1' and 'A2' respectively, while the counterparty risk rating (CRR) is 'A1'/'P-1'. The 'stable' outlook reflects Moody's expectation that despite any deterioration in asset quality, HVB's financial profile will not change significantly. HVB's stand-alone rating is 'baa2' and, from Moody's perspective, reflects the strong capital base, the good liquidity position and the solid asset quality. According to Moody's, HVB is thus well prepared to cope with any deterioration in its currently robust asset quality that might arise as a result of the phasing out of the German government's extensive stimulus package. On 3 May 2022, HVB's long-term Fitch issuer default rating (IDR) was affirmed at 'BBB+' and the short-term rating at 'F2'. The derivative counterparty rating is 'A- (dcr)', the rating for deposits as well as for preferred senior unsecured instruments is 'A-'/'F2'. HVB's long-term Fitch issuer default rating (IDR) is determined by the viability rating (stand-alone rating) of the Bank that continues to stand at 'bbb+'. Fitch continues to emphasise the very good capital base and the resulting high degree of flexibility to mitigate the possible deteriorations in asset quality due to the weakening economic environment. In its rating assessment, Fitch emphasises that HVB's direct exposure to Russia is moderate as most of it is covered by export guarantees. The outlook remains 'negative' as Fitch assumes that the fungibility of capital and liquidity could increase and thus HVB's financial flexibility might be restricted if UniCredit implements its "single-point-of-entry" resolution strategy.

In the course of its annual rating review, S&P affirmed its rating of HVB on 25 February 2022. HVB's issuer credit rating (ICR) is 'BBB+/A-2'. The resolution counterparty rating remains at 'A-'/'A-2' and the rating for preferred senior unsecured debt instruments at 'BBB+'. In its analysis of German banks, S&P emphasises that the path to economic recovery in the wake of the COVID-19 crisis is highly dependent on global developments as the economy is exposed to external shocks as a result of its export orientation despite robust domestic demand. In S&P's rating assessment, HVB's ratings continue to be supported by a strong capital base and the Bank's solid market position in corporate banking. HVB's ratings are therefore one notch above the ratings of UniCredit S.p.A. despite the operating interdependencies between HVB and UniCredit. The rating outlook remains 'negative'. The negative outlook for HVB continues to reflect the fact that HVB's ratings might be lowered in the medium term on account of the uncertainties regarding the implementation of UniCredit's "single-point-of-entry" resolution strategy and the related effects on subsidiaries.

Report on subsequent events (events after the reporting period)

There were no significant events at HVB Group after 30 June 2022 to report.

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 Management's Discussion and Analysis of the 2021 Annual Report.

General economic outlook

Following the strong recovery in 2021, the global economy is likely to significantly slow down in 2022 and 2023. After global GDP growth of 6.1 percent in 2021, HVB Group is assuming an increase of 3.0 percent for 2022 (2023: 2.8 percent; The UniCredit Economics Chartbook: Downside risks to growth building, published on 29 June 2022). Economic headwind is coming primarily from higher energy costs for companies and consumers as well as from persistent disruptions in supply chains, most recently caused in particular by the lockdowns in China. High inflation rates have resulted in a noticeable reduction in the real incomes of private households, which has been reflected in historic lows in consumer confidence in both Europe and the USA. The financing conditions in international equity and credit markets have also deteriorated as a result of the hefty interest rate hikes by numerous central banks to combat inflation, the Federal Reserve in particular. More interest rate-sensitive areas in the US economy, including housing and corporate investments, have already started to slow down. A sudden halt in gas supplies from Russia would pose a significant downside risk for the global economy and for Europe in particular. The potential supply bottlenecks in energy this would cause could lead to an even stronger contraction in the global economy and to a recession in Europe as 2022 progresses and then in 2023. The general economic outlook entails considerable uncertainties on account of the Russia-Ukraine conflict and the situation regarding the pandemic in China, which further complicates making macroeconomic forecasts.

Financial Review (CONTINUED)

HVB Group expects economic growth in the USA to slow down from 5.7 percent in 2021 to 2.4 percent in 2022, followed by 1.3 percent in 2023 (The UniCredit Economics Chartbook: Downside risks to growth building, published on 29 June 2022). Due to rising interest rates, a noticeable decline has already been seen in mortgage loan approvals and the sale of existing homes. This trend is likely to continue in view of further expected interest rate hikes by the Federal Reserve. HVB Group expects the key interest rate to then reach 3.50 percent at year-end 2022 and not to be increased any further in 2023. Due to the delayed effect, the full impact of the higher interest rates on the US economy is not likely to be reflected in an economic slowdown until 2023.

In China, HVB Group expects GDP growth to slow down significantly from 8.1 percent in 2021 to 2.4 percent in 2022 and 4.0 percent in 2023 (The UniCredit Macro and Markets Weekly: ECB and Fed rate increases to underpin curve flattening trend, published on 22 July 2022). These would be the lowest growth rates in more than 40 years except for 2020, the year of the pandemic. The residential housing market overheating and the resulting weaknesses in the financial sector as well as higher energy costs are likely to have an adverse effect. A significant risk factor is the development of the pandemic in China. According to current government regulations on pandemic control, it is sufficient if only a small number of infections are detected to impose a strict lockdown. This could additionally weigh on the economy as already seen in the first half of 2022. However, the economic downturn is likely to be curbed by the efforts of the central government to support the economy. Several measures serving to boost the economy, including tax cuts for car purchases, tax relief for several sectors and support measures for the unemployed and infrastructure projects, have already been announced.

For the eurozone, HVB Group anticipates a slowdown in growth from 5.3 percent in 2021 to 2.8 percent in 2022 and 1.3 percent in 2023 (The UniCredit Economics Chartbook: Downside risks to growth building, published on 29 June 2022). Key drivers of the weakening momentum are likely to be the high inflation rates and the resulting reduction in real incomes of private households. Besides soaring energy costs and persistent supply bottlenecks for the industry, the emerging slowdown in global trade is expected to put the export-dependent manufacturing industry additionally under pressure. HVB Group expects the ECB to raise the key rate (deposit rate) step by step to 1.25% in the first quarter of 2023. The weak growth and the gradually slowing inflation are then likely to prompt the central bank to discontinue increases in interest rates.

For 2022, HVB Group is expecting GDP growth at country level in the eurozone of 1.6 percent for Germany (The UniCredit Economics Chartbook: Downside risks to growth building, published on 29 June 2022). As was the case the previous year, economic growth in Germany should be less dynamic than in France (2.4 percent), Italy (2.9 percent) and Spain (4.1 percent). The difference in growth rates is again likely to be attributable above all to supply bottlenecks, which will presumably be eliminated only gradually. The German economy is impacted more strongly by this than its European neighbours owing to its independence on industry. German GDP should then grow by 1.8 percent in 2023 compared with growth of 1.4 percent in France, 1.1 percent in Italy and 2.6 percent in Spain.

According to HVB Group's assessment, economic output in Germany in the second half of 2022 will continue to remain below the level from before the pandemic at year-end 2019 before it then exceeds the pre-crisis level in the first quarter of 2023. A crucial factor of uncertainty for the outlook is the potential lack of gas from Russia and its impact on GDP. Above all, the chemicals sector as an important sub-supplier of other industries might be adversely affected by this which, in turn, would affect the entire economy. Higher energy prices, weaker global trade and the persistent supply bottlenecks will probably continue to weigh on the German economy. In particular, the last factor named remains a major impediment as the manufacturing industry has recorded an all-time high in orders on hand but is unable to work through these on account of a lack of intermediate goods. In April 2022, manufacturers stated that orders already received correspond to four and a half months of production activity (Ifo Institute survey, range of orders for industry at record level, published on 16 May 2022). In the automotive industry, the orders on hand were even around seven and a half months. In addition, the supply bottlenecks have prevented companies' still very low levels of inventories from returning to normal.

Banking sector development in 2022

The first half of 2022 was marked by geopolitical risks, persistently high inflation and a sharp increase in commodity and energy prices. Despite the risks, the good fundamental indicators in the European banking sector have so far not shown any significant deterioration.

Relatively low profitability remains a weak point in the European banking sector, which has been significantly below the profitability of US banks since the financial crisis. However, the banks recovered in 2021 and on average, the return on equity of European banks was 7.5 percent in 2021 compared with a mere 1.6 percent in 2020 (data from the European Banking Authority (EBA)). In the first guarter of 2022, the return on equity fell to 6.6 percent as several banks had to enter substantial write-downs on their exposures to counterparties from Russia and Ukraine. At the end of March 2022, a low level of only 0.3 percent of all exposures of European banks related to borrowers from Russia, Belarus or Ukraine. On the income side, the higher interest rate environment had a positive effect on the net interest income of banks with a further improvement expected in 2022. Banks were also able to benefit from the favourable TLTRO III conditions which, however, were not extended beyond June 2022. Despite this, it is to be assumed that banks will make premature TLTRO III repayments only to a minor extent as it makes economic sense for the banks to continue TLTRO III business in view of the expected increases in interest rates by the ECB. To date, banks have drawn down a total amount of €2.2 trillion in TLTRO III funds from the ECB, which reflects the very favourable conditions.

Income in the area of investment banking has fallen in 2022 compared with the previous year, reflecting the volatility in markets and the lower volume of capital market transactions. Moreover, there is a considerable amount of uncertainty concerning the operating costs of banks as a result of the inflation. There is also increased uncertainty about gas supplies from Russia and the further macroeconomic development. High energy costs will adversely affect the credit indicators of borrowers – both companies and private households. Therefore, the consensus estimate for risk costs in 2022 and 2023 has been raised in recent months. A severe recession and a sudden halt in gas supplies from Russia represent a risk scenario for the second half of 2022 for the German banking sector in particular. Germany is heavily dependent on exports and does not have any liquefied gas terminal, which means it can only substitute Russian gas supplies to a limited extent. On the structural side, the profitability of European banks continues to improve. 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. Furthermore, there was a revival of bank mergers primarily in Spain and Italy, which is likely to additionally boost profitability in the sector in the medium term. It is to be assumed that the process of consolidation of European banks will continue, although still focusing on domestic consolidation rather than extremely large cross-border mergers. Moreover, the trend towards streamlining and focusing banks' business models continues, with the concentration on core areas and markets in strong competitive positions generating correspondingly higher margins. On the costs side, most banks are also adapting their office space to the new hybrid working models.

Despite the pandemic and the conflict in Ukraine, the asset quality of banks continued to improve, above all due to continued active NPL sales and securitisations by the banks. The rate of impaired loans fell to 1.9 percent at the end of March 2022, compared with 2.0 percent at the end of 2021 and 6.5 percent at the end of 2014 (EBA data). Comprehensive government support measures, loan guarantees and payment moratoria for loan payments have helped to staunch the inflow of impaired loans, despite the sharp economic decline in 2020. A major factor is the extensive use of payment moratoria and state guarantees for loans. According to the EBA, the volume of loans in moratorium declined significantly from €811 billion at the end of June 2020 to just €12 billion at the end of December 2021, although this has only resulted in a small rise in NPL inflows to date. In addition, state-guaranteed corporate loans remain at a high level of €367 billion or 6.3 percent of all loans to companies (EBA data at the end of March 2022). The asset quality of European banks is likely to be slightly compromised only with a time lag from 2022 - but to a manageable extent.

Financial Review (CONTINUED)

The capital base of banks continues to stand at a high level, even though the average capital ratio in the banking sector fell by 0.5 percentage points in the first quarter of 2022 due to a stronger focus placed on dividends and share buybacks. At the end of March 2022, the average CET1 capital ratio of European banks, at 15.0 percent (on a fully loaded basis), matched the level before the pandemic at the end of 2019 (EBA data). The stronger focus on shareholder remuneration can be explained by the ECB's restrictive guidelines on dividends and share buybacks in 2020 and 2021. However, the capital ratios are still considerably higher than the regulatory minimum requirements and many banks are continuing to plan dividends or share buybacks in order to reduce their surplus capital. The macroeconomic forecast poses a risk in this connection. In addition, the ECB has asked banks to take account of a possible recession or a halt in Russian gas supplies in their distribution plans.

The liquidity position of European banks is still at a high level. The surplus liquidity of European banks continues at a very high level of €4.4 trillion in mid-July 2022 and it is to be assumed that liquidity in 2022 will remain way above historical levels due to the small number of premature TLTRO III repayments. At the end of March 2022, the average degree of liquidity coverage was 168 percent and thus considerably higher than the regulatory minimum requirements of 100 percent.

To summarise, the banking sector in Europe is in good shape and is well prepared for a possible downturn in the economy. Profitability will remain one of the main challenges in the medium term. Banks will therefore need to make further structural adjustments, such as the digitalisation of business processes, the adjustment of branch networks and further consolidation in the banking sector.

Development of HVB Group

Following the strong recovery in 2021, the global economy is likely to significantly slow down in 2022 and 2023. After global GDP growth of 6.1 percent in 2021, HVB Group is assuming an increase of 3.0 percent for 2022 (2023: 2.8 percent). Economic headwind is primarily coming from higher energy costs for companies and consumers as well as from persistent disruptions in supply chains, most recently caused in particular by the lockdowns in China. A sudden halt in gas supplies from Russia would pose a significant downside risk for the global economy and for Europe in particular. The potential supply bottlenecks in energy this would cause could then lead to an even stronger contraction in the global economy and to a recession in Europe in 2023.

We are continuing to follow the guidelines of the three-year 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.

In the first half of the year, operating income benefited from a sharp increase in net trading income that is likely to return to normal again in the second half of the year. For the full year, we anticipate a notable increase in operating income after an adjustment for non-recurrent effects compared with 2021, whereas we expected the level to remain constant at year-end 2021. We continue to expect operating costs to record a distinct decline as projected at year-end 2021. In view of the positive trend in operating income in the first half of the year, we have adjusted our forecast for the cost-income ratio downwards and now expect a significant improvement in the cost-income ratio for 2022 compared with 2021.

Based on our latest assessment, we expect a decline in net writedowns of loans and provisions for guarantees and commitments in the second half of 2022 compared with the first half of 2022. While a net allocation of €29 million to valuation allowances was recorded in the first half of 2022, we expect a roughly balanced result for net write-downs of loans and provisions for guarantees and commitments in the second half. Compared with the previous year, we anticipate a sharp decline in net write-downs of loans and provisions for guarantees and commitments over the year 2022 as a whole.

Both operating profit before tax and operating profit after tax are likely to again be significantly higher at year-end 2022 than the respective results in 2021. This is due to the development in operating profit coupled with the elimination of non-recurrent effects in restructuring costs and in net income from investments from the previous year.

We assume that the changed interest environment will have a positive impact on our income while costs should remain at the level reported in the first half of the year despite high inflation rates. However, in the second half of 2022, it will not be possible to match the particularly good results generated in profit before tax in the first half of the year. According to our expectations, there will be a sharp decline in net operating profit of the Corporates operating segment compared with the first half of 2022. By contrast, a significant improvement in operating profit is expected in the Retail operating segment in the second half of 2022 compared with the first half. In the Other business area, we expect a sharp decline in the second half of 2022, due partly to a positive non-recurrent effect in the first half of 2022.

For the 2022 financial year, we anticipate a solid capital base for HVB Group with a CET1 capital ratio that is slightly higher than the figure in 2021.

The opportunities in terms of future business policy and corporate strategy, performance and other opportunities were described in detail in the 2021 Management's Discussion and Analysis 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.

The Risk Report deals exclusively with the risks at HVB Group. The opportunities are presented separately in Management's Discussion and Analysis of the 2021 Annual Report in the section entitled "Opportunities in terms of future business policy and corporate strategy, performance and other opportunities". The statements made there continue to be valid in principle.

For the first time in the 2022 half-year, HVB Group is divided into the following operating segments:

- Retail
- Corporates
- Other

The previous-year figures have been adjusted accordingly. Descriptions in this connection are provided in the segment reporting in these notes to the consolidated financial statements.

The income statements for each operating segment and comments on their economic performance are provided in the Note "Income statement, broken down by operating segment" in the notes to the consolidated financial statements. The contents and objectives of the individual operating segments are described in detail in the Note "Components of segment reporting by operating segment" and the Note "Method of segment reporting by operating segment". 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.

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 to meet its contractual obligations, 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. Liquidity risk is understood to be the danger that the Bank will not be able to meet its payment obligations on time or in full. However, it is also defined as the risk of sufficient liquidity not being available when required or that liquidity can only be obtained at higher interest rates, or that the Bank will only be able to liquidate assets on the market at a discount.

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 or systems, human error or external events. This definition includes legal risk but excludes strategic and reputational risk. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from measures taken by supervisory authorities, and private settlements.

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 obligations 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 obligation 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 consequence, fundamental management decisions could, in retrospect, prove to be disadvantageous in terms of the Bank's long-term goals. In addition, some decisions may be difficult to reverse or cannot be reversed at all. 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.

Risk Report (CONTINUED)

Integrated overall bank management

Risk management

HVB Group's risk management programme is built around the business strategy adopted by the Management Board of HVB, 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 financial resources. 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 internal 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 2022, these planning scenarios, also referred to as adverse scenarios, have been derived against the backdrop of the macroeconomic developments. Whereas the first scenario assumes a feebler and thus a less dynamic economic recovery after the COVID-19 pandemic, the second scenario is based on continued high inflation. Since the available financial resources are 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 Management Board. The CRO reports on a regular basis to the Management 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. Since 1 June 2022, Credit Risk Operations (CRP), which was created by merging the Central Credit Management (CCM) and Recovery Management (SCS) units, has been 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 controlling market risk and the ALM & Funding unit within the Chief Financial Officer (CFO) organisation for controlling liquidity risk. The Non- Financial Risk 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 CFO 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 Chief Operating Office (COO) unit. Within HVB Group, this is performed by the Real Estate unit, HVB Immobilien AG and the UniCredit Services S.C.p.A., which was engaged by HVB Immobilien AG by way of a service level agreement. 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 Management 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 subdivided in accordance with 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 Risk 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 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 CFO organisation (continuous monitoring of the liquidity risk situation and compliance with limits). The Strategic Credit & Integrated Risks unit monitors credit risk, business risk, financial investment risk and real estate risk as well as the aggregate economic capital and the internal 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 Management Board.

The following are quantifiable risk types: credit risk, market risk, operational risk, business risk, financial investment risk (covered under credit risk and market risk), real estate risk, pension risk and reputational risk. The available financial resources are defined, quantified and compared with the risk capital for the analysis of the risk-taking capacity.

Liquidity risk is also a quantifiable risk but does not flow into 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 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 risk strategy of HVB Group 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. This control is supplemented by risk-type-specific limits in credit risk and market risk. A qualitative description is provided of the strategic objectives for strategic risk, liquidity 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 Management Board of HVB are reviewed on both an ad hoc and an annual basis and modified when necessary.

Risk Report (CONTINUED)

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 internal 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 each risk type (for example credit risk) to ensure that the planned economic risks remain within the parameters defined by the Management 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 group-wide 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 internal 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 Management Board of HVB. The Management 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.

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 23.2% at 30 June 2022 (31 December 2021: 21.0%).

Economic capital adequacy

The internal capital is the sum of the aggregated economic capital for all quantified risk types (with the exception of liquidity risk). 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 "Internal capital after portfolio effects".

Internal capital after portfolio effects (confidence level 99.90%)

	30/6/	2022	31/12/	2021
Broken down by risk type	€ millions	in %	€ millions	in %
Credit risk	3,436	40.0	3,609	43.9
Market risk	2,921	34.0	2,125	25.8
Pension risk	1,252	14.6	1,463	17.8
Operational risk	375	4.4	425	5.2
Real estate risk	149	1.7	147	1.8
Business risk	225	2.6	225	2.7
Reputational risk	40	0.5	41	0.5
Aggregated economic capital	8,398	97.7	8,036	97.6
Model risk cushion	201	2.3	195	2.4
Internal capital of HVB Group	8,599	100.0	8,231	100.0
Available financial resources of HVB Group	18,548		17,920	
Risk-taking capacity of HVB Group, in %		215.7		217.7

Contains rounding differences.

Internal capital rose by €368 million in comparison to 31 December 2021.

Risk Report (CONTINUED)

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

	30/6/202	30/6/2022		31/12/2021		
Broken down by operating segment	€ millions	in %	€ millions	in %		
Retail	333	4.7	366	5.6		
Corporates	4,134	57.9	4,891	74.4		
Other	2,678	37.5	1,316	20.0		
Internal capital (without pension risk and without						
the model risk cushion) of HVB Group	7,146	100.0	6,573	100.00		

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, liquidity and interest rate 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 Management 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. UniCredit S.p.A. has been identified as systemically important at a global level and HVB has at a 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 15 October 2021 and has been in effect since then.

Risk-taking capacity

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

HVB Group uses an internal definition for the available financial resources that, like risk measurement, has been based on a going concern approach since 2019. Under this approach, available financial resources are sufficient to protect against risks so as to ensure business operations are maintained. The risk-taking capacity is defined by comparing unexpected losses at the confidence level (internal capital) with the ability to absorb losses using the available financial resources. When determining the available financial resources, 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. The available financial resources at HVB Group totalled €18,548 million as at 30 June 2022 (31 December 2021: €17,920 million).

With internal capital (including the model risk cushion) of $\in 8,599$ million, the risk-taking capacity for HVB Group is 215.7% (31 December 2021: 217.7%). This figure is higher than the target of 195% HVB Group set itself in the 2022 risk appetite framework. The decline of 2.0 percentage points in comparison with 31 December 2021 for HVB Group is attributable to growth of $\in 368$ million or 4.5% in internal capital in the first half of 2022. The available financial resources have increased by $\notin 628$ million or 3.5%. The increase in available financial resources is largely due to the positive development of Other comprehensive income (Other comprehensive income, OCI as part of Common Equity Tier 1 capital) and of the profit component.

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 internal capital and economic capital, risk-type-specific limits and limits for risk concentrations has been implemented to ensure this. It covers all the risks that need to be backed with capital. Consequently, unexpected losses for credit, market (including pension risks), operational, business, real estate and reputational risk are currently recorded. In addition, any model risks are included in the internal capital by means of a cushion.

This system of limits reflects the business and risk strategies, taking into account the risk appetite and the available financial resources, at the level of HVB Group, and ensures compliance with the risk-taking capacity. The risk limits are approved by the Management Board of HVB each year during the strategy process.

The internal capital limits are allocated at the level of HVB Group, broken down by risk type and for the internal capital as a whole. Based on the aggregate limit set for internal 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 on a monthly basis. Any overshooting of limits is immediately escalated and 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 the first half of 2022:

- Pandemic scenario (in December 2021) delayed recovery from the COVID-19 pandemic
- Pandemic+ scenario (from December 2021) delayed recovery from the COVID-19 pandemic, an increase in global protectionist tensions and sovereign debt stress in Europe
- Severe inflation scenario (from December 2021) sharp increase in inflation and inflation expectations
- Temporary stagnation (from December 2021) stagnation in the German economy
- 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 as well as any measures required presented to the Management Board of HVB. 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.

Risk Report (CONTINUED)

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.

The 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 their avoidance 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 2022. 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 of the COVID-19 pandemic, the Russia-Ukraine conflict as well as sustainability topics. The outcome of the 2022 risk inventory will be presented to HVB's Financial and Credit Risk Committee in September 2022 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 Management 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 are created, which focus on specific countries or industries.

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 HVB Group in the 2021 Annual Report. Where the measurement methods for individual risk types have meanwhile been refined, details are presented under the risk type concerned.

1 Credit risk

The economic capital for credit risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk cushion, amounts to €3,590 million, which is €175 million lower than the total reported value as at 31 December 2021 (€3,765 million). The financial investment risk from holdings in unlisted companies has been included in credit risk since September 2020.

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 arising 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 €15 million (31 December 2021: €18 million).

Development of metrics by operating segment

		EXPECTED LOSS ¹ € millions		RISK DENSITY ² in BPS		ECONOMIC CAPITAL ³ € millions	
Broken down by operating segment	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021	
Retail	64	72	16	18	224	250	
Corporates	257	278	17	18	3,250	3,379	
Other	2	3	0	1	116	135	
HVB Group	323	353	12	14	3,590	3,765	

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%.

3 Without taking account of diversification effects and including financial investment risk.

Risk Report (CONTINUED)

In the first half of 2022, the expected loss of HVB Group decreased by €30 million and risk density by 2bp.

The key contributor to this development was the Corporates operating segment, in which the expected loss fell by \notin 21 million and the risk density by 1bp. The tourism industry contributed to this portfolio

improvement in particular on account of loan repayments and the first rating upgrades.

The expected loss in the Retail operating segment decreased by €8 million; the risk density decreased by 2bps mainly due to rating improvements in the private customers industry group.

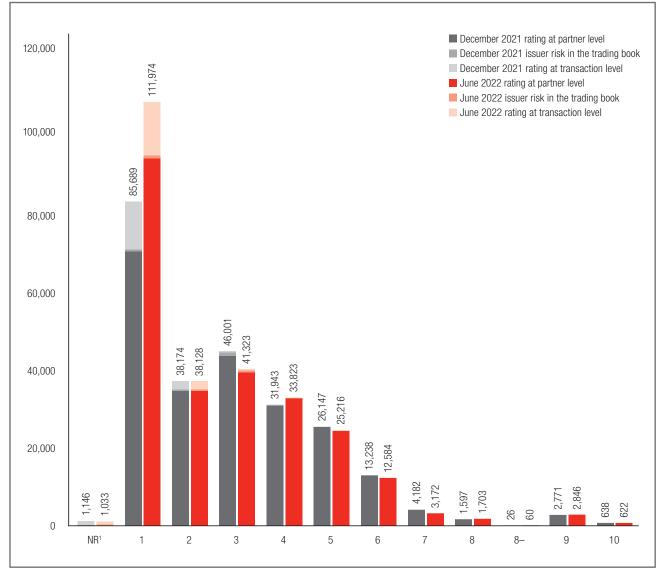
Breakdown of credit default risk exposure by operating segment and risk category (€ mill								
Broken down		EDIT DEFAULT RISK OF WHICH Exposure counterparty Risk		OF WHICH ISSUER RISK IN BANKING BOOK		OF WHICH ISSUER RISK IN TRADING BOOK		
by operating segment	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Retail	40,132	39,477	74	88	—	—	_	_
Corporates	159,876	163,357	23,405	25,795	16,443	15,573	2,142	2,315
Other	72,476	48,718	1,106	105	26,384	28,584	—	_
HVB Group	272,484	251,552	24,585	25,988	42,827	44,157	2,142	2,315

HVB Group's credit default risk exposure increased by ${\in}20,\!932$ million in the first half of 2022.

In the Retail segment, exposure increased by €655 million due primarily to the business with private customers.

There was a reduction in exposure of \in 3,481 million in the Corporates operating segment, observable mainly in the financial institutions (incl. foreign sovereigns) and energy industry groups.

The increase in exposure in the Other business area of €23,758 million is mainly the result of higher deposits with Deutsche Bundesbank.



Breakdown of credit default risk exposure by rating class (€ millions)

1 Not rated.

The rating structure of HVB Group changed in the course of the first half of 2022, primarily as a result of the increase in exposure of \notin 26,285 million in rating class 1.

The key reason for this is essentially the increase in liquidity reserves built up at Deutsche Bundesbank.

Risk Report (Continued)

Development of metrics by industry group

Broken down	CREDIT DEFAULT RISK EXPOSURE € millions		OF WHICH ISSUER RISK IN TRADING BOOK € millions		EXPECTED LOSS ¹ € millions		RISK DENSITY ² in bps	
by industry group	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Financial institutions								
(incl. foreign sovereigns)	85,189	65,270	1,546	1,724	30	30	4	5
Real estate	28,305	28,838	32	31	26	29	9	10
Public sector								
(German sovereign incl. sub-sovereign,								
excl. public service companies)	18,358	22,313	38	92	—	—	—	_
Special products	17,180	16,100	1	—	5	5	3	3
Energy	14,105	16,004	73	60	11	13	8	8
Machinery, metals	11,493	10,799	18	23	30	35	27	34
Chemicals, pharma, healthcare	10,946	9,599	62	46	33	30	31	32
Automotive	9,206	7,412	63	25	21	17	24	24
Construction, building materials	7,592	7,020	15	54	14	13	18	18
Consumer goods	6,580	5,677	19	15	18	19	28	35
Food, beverages	6,326	5,910	28	6	13	11	20	19
Services	6,057	5,852	51	43	19	19	32	33
Transport, travel	5,334	5,080	26	27	12	12	23	24
Telecommunication, IT	5,297	5,303	61	59	8	8	15	16
Agriculture, forestry	3,539	3,894	6	9	9	9	25	23
Electronics	3,008	2,713	4	21	6	8	21	28
Tourism	2,481	2,600	—	—	21	31	111	159
Media, paper	2,248	2,241	15	6	7	9	32	43
Textile	1,526	1,458	19	9	3	3	25	23
Shipping	1,520	1,672	_	_	4	5	30	34
Public service companies	918	1,052	52	59	1	1	8	8
Private customers	25,259	24,701	_	_	32	45	13	18
Other	17	44	12	6	_	1	33	276
HVB Group	272,484	251,552	2,142	2,315	323	353	12	14

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%

The impact of the COVID-19 pandemic is monitored in each of the industry groups on a regular basis and taken into account in the 2022 risk strategy.

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 increased by €19,919 million as at 30 June 2022 compared with year-end 2021, driven by higher deposits at the Bundesbank. However, the portfolio's expected loss remained unchanged and the risk density fell by 1bp, to 4bps as a result.

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 markets and investment banking business of UniCredit and other business activities (such as export finance and guarantees).

Real estate

In the real estate industry, exposure as at 30 June 2022 decreased slightly by \in 533 million to \in 28,305 million compared with year-end 2021, whereby the expected loss and also the risk density remained at a low level (\in 26 million or 9bps). The financing business remains focused on Germany.

HVB continues to place its focus on disciplined risk management in compliance with financing policies. Market and portfolio developments are monitored on an ongoing basis in order to be in a position to identify and counter negative developments at an early stage. So far, the COVID-19 pandemic has not resulted in any particular negative developments for the real estate portfolio. No negative consequences have yet been identified in the portfolio from the recent turnaround in interest rates and the increases in construction costs.

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

The public sector (including German sovereign, excluding public service companies) industry group contains both public entities and private enterprises with public-sector owners. 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 (including German sovereign, excluding public service companies) industry group, exposure decreased by €3,955 million in the first half of 2022. This decrease is essentially attributable to HVB's expired liquidity reserves.

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 fund financing, structured lease transactions and other structured financial transactions (not including project and acquisition financing).

In the special products industry group, exposure increased by €1,080 million in the first half of 2022 compared with 2021, despite the more difficult economic environment. In this context, the focus remained on customer-related securitisations and ABS/CLO bond investments, which was also in line with the 2022 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. Despite this growth the expected loss and the risk density remained stable at a very low level (€5 million or 3bps respectively) compared with 2021.

Energy

Exposure in the energy industry group decreased by €1,899 million in the first half of 2022 and is mainly attributable to expired hedging transactions.

The increased volatility of energy and raw material prices with a corresponding impact on the fair value of hedging transactions continues. As our focus for new energy business is, as defined in the risk strategy, on large international companies with strong credit ratings in line with our internal sustainability standards, the overall portfolio quality was improved with an expected loss of €11 million and a risk density of 8bps. Project loans in the area of renewable energy are in line with the 2022 risk strategy and the funding 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.

Risk Report (Continued)

Development of credit default risk exposure of eurozone countries

	CREDIT DEFAU EXPOSUF	OF WHICH ISSUER RISK IN TRADING BOOK		
Broken down by eurozone countries	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Germany	187,575	162,031	384	188
France	11,012	11,547	98	183
Spain	7,106	7,710	109	66
Italy	7,045	9,264	401	644
Ireland	6,311	5,391	4	13
Netherlands	4,966	4,429	35	45
Luxembourg	4,297	4,423	89	68
Austria	2,320	2,222	352	410
Belgium	617	446	23	12
Finland	591	693	1	2
Portugal	115	83	9	1
Greece	59	44	—	_
Estonia	24	11	2	_
Cyprus	11	13	—	1
Slovenia	9	13	—	6
Lithuania	8	5	8	4
Slovakia	5	26	4	3
Latvia	5	—	4	_
Malta	_	_	_	
Supranational organisations and multilateral banks	2,104	2,297	189	223
HVB Group	234,180	210,648	1,712	1,869

Italy

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

	CREDIT DEFAU EXPOSUF		OF WHICH ISSUER RISK IN TRADING BOOK	
Broken down by country/region outside the eurozone	30/6/2022	31/12/2021	30/6/2022	31/12/2021
USA	9,897	8,827	220	211
Switzerland	6,446	5,925	79	62
UK	6,151	6,061	19	38
Japan	3,435	5,510	_	
Asia/Oceania (without Japan, China, Hong Kong)	3,033	3,771	1	3
Western Europe (without Switzerland, UK)	1,955	2,221	5	15
Eastern Europe (without euro countries)	1,426	1,456	82	80
China (including Hong Kong)	1,324	2,112	_	
CIS/Central Asia (without Turkey)	1,316	1,567	7	26
including Russia	1,079	1,304	6	24
including Ukraine	5	28	—	
including White Russia	1	1	_	
Near/Middle East	1,124	1,131	_	
Turkey	896	1,068	2	
Africa	680	692	—	
North America (including offshore jurisdictions, without USA)	413	321	4	8
Central/South America	208	242	11	3
Without country classification	_	—	_	_
HVB Group	38.304	40.904	430	446

In the first half of 2022, the total exposure to customers in countries/ regions outside the eurozone fell by €2,600 million. The exposure to customers in Russia decreased by €225 million in the first half of 2022.

Financial derivatives

Alongside the goal of generating returns, derivatives are employed to manage market 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 bear counterparty risk or, in the case of credit derivatives, which additionally serve to manage credit risk, also issuer risk.

The positive fair values are relevant for purposes of credit default risk as replacement values for the OTC derivatives, which represent the potential costs that HVB Group would incur to replace all of the original contracts with equivalent transactions in case of 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 2022 totalled €220.4 billion (31 December 2021: €87.2 billion). The increase of €133.2 billion compared with year-end 2021 is primarily attributable to interest rate derivatives (up €127.2 billion), and here in particular to OTC interest rate swaps (up €125.7 billion). In addition, foreign exchange forwards/options increased by €2.9 billion and cross-currency swaps by €2.8 billion.

In accordance with the regulatory provisions under 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 \in 6.5 billion as at 30 June 2022 (31 December 2021: \in 6.8 billion).

Risk Report (Continued)

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

Derivative transactions									(€ millions)	
		NOM	MINAL AMOUNT			FAIR VALUE				
	RES	SIDUAL MATURITY	(TOT	AL	POSI	TIVE	NEGATIVE		
	UP TO 1 Year	MORE THAN 1 YEAR UP TO 5 YEARS	MORE THAN 5 YEARS	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021	
Interest rate derivatives	2,390,737	2,205,117	2,012,559	6,608,413	5,584,680	195,784	68,610	192,160	63,873	
Foreign exchange derivatives	242,067	46,570	2,752	291,389	262,380	5,500	2,642	5,442	2,612	
Cross-currency swaps	33,259	113,648	63,542	210,449	211,063	7,196	4,380	8,154	3,729	
Equity/index derivatives	73,065	75,866	18,164	167,095	192,850	6,454	6,669	5,470	5,845	
Credit derivatives	1,574	21,427	396	23,397	17,742	99	210	182	334	
- Protection buyer	966	11,521	165	12,652	9,999	88	12	101	324	
- Protection seller	608	9,906	231	10,745	7,743	11	199	81	10	
Other transactions	46,589	21,168	630	68,387	61,233	5,389	4,685	8,055	7,073	
HVB Group	2,787,291	2,483,796	2,098,043	7,369,130	6,329,948	220,422	87,197	219,463	83,466	

Derivative transactions with a residual maturity of up to three months accounted for a nominal total amount of €1,154,778 million as at 30 June 2022 (of which for credit derivatives: €268 million).

Derivative transactions by counterparty type

		FAIR VALUE				
	POSITI	POSITIVE		E		
	30/6/2022	31/12/2021	30/6/2022	31/12/2021		
Central governments and central banks	4,823	8,206	1,369	1,222		
Banks	117,855	45,063	119,221	45,941		
Financial institutions	91,043	28,029	90,099	29,264		
Other companies and private individuals	6,701	5,899	8,774	7,039		
HVB Group	220,422	87,197	219,463	83,466		

(€ millions)

2 Market risk

The economic capital for market risk at HVB Group, without taking account of diversification effects between risk types, amounts to \notin 3,086 million (31 December 2021: \notin 2,258 million).

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

(€ millions)

0.2

_

3.4

(€ millions)

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

MARKET RISK OF POSITIONS MARKET RISK OF POSITIONS RECOGNISED AT FVTPL RECOGNISED AT FVOCI AVERAGE PERIOD END AVERAGE PERIOD END 30/6/2022 30/6/2022 31/12/2021 2022 31/12/2021 2022 3.6 4.5 5.7 2.9 4.8 3.7 8.0 7.7 7.1 2.6 3.3 2.3

0.3

5.6

0.4

7.4

0.7

6.6

8.2

1	Including	commodity	risk.

HVB Group²

Credit spread risk

Interest rate positions

Equity/index positions1

Foreign exchange positions

2 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 past twelve months are described below, broken down by the relevant risk metrics.

Regulatory capital requirements of HVB Group

30/6/2022	31/3/2022	31/12/2021	30/9/2021	30/6/2021
142	123	76	47	47
227	337	294	179	198
231	255	240	221	263
52	64	51	51	55
10	11	7	4	6
33	34	34	35	35
37	65	44	44	60
	227 231 52 10 33	142 123 227 337 231 255 52 64 10 11 33 34	142 123 76 227 337 294 231 255 240 52 64 51 10 11 7 33 34 34	142 123 76 47 227 337 294 179 231 255 240 221 52 64 51 51 10 11 7 4 33 34 34 35

2.2

8.9

11.8

3.0

9.1

10.5

Risk Report (CONTINUED)

Regulatory back-testing of the internal model at HVB for the first half of 2022

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. Two reportable back-testing outliers occurred in the first half of 2022. The hypothetical loss was larger than the forecast VaR figure on these days.

Alongside back-testing using the hypothetical change in value, HVB also uses a back-testing method based on the change in the actual portfolio value to validate the model. In the first half of 2022, there were four instances of a limit being exceeded.

Besides back-testing, further methods are used at quarterly intervals to check the quality of the model. These involve analysing the suitability of both the modelling and the risk factors used and adjusting them as required. Risks that cannot be adequately modelled are monitored and limits set for them if they are material.

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.

Interest rate risk in the banking book

The interest rate risk in the banking book is 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 negative effects on net interest income caused by fluctuations in interest rates over several years and to generate sustainable earnings. The modelling of contractually short-term deposits and non--interest-bearing assets and non-interest-bearing liabilities helps to stabilise the flow of income. Interest rate risk management also takes account of customer behaviour with regard to early repayments of loans. Parameters are based on statistical analyses.

HVB Group measures and monitors this risk with regard to the change in the economic value as well as the income of the Bank. In this context, it is ensured that the methodologies and models as well as limits or thresholds for the sensitivity of net interest and the present value are consistent. 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. In line with regulatory reporting requirements, 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 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 June 2022, the plus 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 Circular 6/2019 (BA) of the Federal Financial Supervisory Authority on interest rate risks 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 the sight and savings deposits.

Information on interest rate risks in the banking book

	30/6/2022		31/12/2021	
	€ millions	in %	€ millions	in %
+ 200 basis points	(2,065)	(11.0)	(1,644)	(9.0)
- 200 basis points	907	4.8	115	0.6

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. The changes in figures compared with year-end 2021 are due to the changed interest rate level.

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. The focus of this analysis is the impact of changes in interest rates on net interest income compared with the benchmark scenario over a defined time horizon. The scenarios are limited internally with parallel shifts in the yield curve by 100bps upwards (parallel upwards) and by minus 25bps to minus 100bps downwards depending on the currency (parallel downwards). 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. Model assumptions are also incorporated into the analysis. This relates notably to products with unknown and/or undefined maturities and included options. The results are below the internal early warning indicator of minus 10.0%.

Effects of changes in the interest rate on net interest

	30/	6/2022	31/12	/2021
	€ million	s in %	€ millions	in %
Parallel upwards	7	3.4	(63)	(2.7)
Parallel downwards	9	5 4.1	23	1.0

The resulting sensitivity analysis was carried out on the basis of the planned net interest for the 2022 financial year. The change in results compared with the previous year can be explained by the changed positions held by the Bank as well as the changed interest rate level.

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

Risk Report (CONTINUED)

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 $\in 62.6$ billion at HVB Group for the three-month maturity bucket at 30 June 2022 (at 30 June 2021: $\notin 56.3$ 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 amounted to $\notin 10.0$ billion at the end of the first half of 2022 (30 June 2021: $\notin 8.6$ 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 2022 showed that the available liquidity reserves will cover the refinancing requirements beyond the minimum period required in each case.

The liquidity coverage ratio (LCR) of a minimum of 100% to ensure that an institution is able to meet its short-term payment obligations was exceeded at HVB as at 30 June 2022 with a value of more than 100%.

Funding risk

The funding risk of HVB Group was again low in the first half of 2022 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 2022, HVB Group had obtained longer-term funding with a volume of \notin 4.9 billion (30 June 2021: \notin 11.2 billion, \notin 5.9 billion of which was concluded via the ECB's targeted longer-term funding operations (TLTRO III). There is a regulatory minimum ratio of 100% to be complied with from June 2021 for the NSFR. HVB adhered to a ratio of over 100% in the first half of 2022 based on CRR II requirements. The internal indicator "Structural liquidity ratio greater than three years" was over 100% in this period. On account of their ratings, our Pfandbriefe still remain an important funding instrument.

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 risk-sensitive 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 Services S.C.p.A. provides most IT services for HVB Group. IT services needed to meet special requirements of HVB subsidiaries will be secured through additional selected providers. In this connection, both HVB and HVB Group adhere to a control framework set forth by UniCredit Group in order to monitor and manage all significant IT and cyber risks appropriately within the ICT management processes. Any such outsourcing of activities to additional providers is subject to clear IT compliance guidelines and will also be monitored in the context of the overarching control process.

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 emergency precautions are adapted constantly to accommodate new threats. The business continuity and crisis management function successfully navigated the COVID-19 pandemic and other threats.

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 unfore-seeable 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 Management 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 Management 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 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 CFO 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 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.

Risk Report (CONTINUED)

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.

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 decision of 6 April 2022, the BGH confirmed a criminal judgement in another cum/ex case of the Municipal Court of Bonn, thus solidifying its case law. HVB is monitoring the development.

The Munich tax authorities are currently performing 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 remains to be clarified whether, and under what circumstances, tax credits can be obtained or taxes refunded with regard to different types of cum/cum transactions, and what the further consequences for the Bank will be in the event of different tax treatment. It cannot be ruled out that HVB might be exposed to tax claims in this respect by relevant tax offices or third-party claims under civil law. HVB is in constant communication with relevant regulatory authorities and the competent tax authorities regarding these matters. In this context, HVB is considering the latest view of the German Tax Authorities. HVB is also monitoring the current development following an important decision of the Federal Tax Court (BFH) dated 29 September 2021, through which the BFH acknowledged the transfer of economic ownership in case of a stock loan transaction contrary to a previous decision.

HVB has made provisions.

Claim in relation to collateral enforcement

In late 2019, a holding company of a German industrial group brought a claim against HVB, in its capacity as security agent for a group of noteholders and lenders, aiming at obtaining the annulment and/or damages in relation to an allegedly fraudulent collateral enforcement. In December 2020, the case was formally registered before the District Court of Luxembourg. The alleged claim is still under evaluation.

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.

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 \notin 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 UC Capital Markets LLC motion to dismiss while denying HVB's motion to dismiss. The court has since denied HVB's motion for reconsideration, and HVB has answered the operative complaint.

Adjustment of fees conditions as well as general terms and conditions

On 27 April 2021, the Federal Court of Justice (Bundesgerichtshof) decided in a ruling against another financial institution that in ongoing contracts fee conditions as well as general terms and conditions can only be amended vis-à-vis consumers if the customer declares his consent. Until now, the financial industry had assumed, based on a common provision in the general terms and conditions, that it was sufficient if the customer was notified of the changes and did not object within two months. The bank has examined the effects of the ruling on its contractual relationships. For a part of the contracts, adjustments to fee conditions made in the past under this provision are ineffective, so that repayment obligations may arise. The bank is asking the clients concerned to declare their consent to the current fees and general conditions.

Risk Report (CONTINUED)

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 District of New York court claiming damages in connection with the repayment of a syndicated loan for two oil drilling rigs HVB participated that defendants are alleged to have unlawfully obtained.

Claim in relation to interest rate swap

In December 2021 HVB was named as defendant in a case pertaining to an interest rate swap commenced by an Italian region before the Court of Bologna in Italy. The region argues, inter alia, HVB's precontractual and/or non-contractual liability because HVB had allegedly missed to include certain requirements in the swap allegedly needed for the validity of the contract. The region seeks damages for an amount of approx. €52 million (equal to the payments made under the swap), as well as a declaration that no further sums are due to HVB (equal to approx. €18 million). The first hearing of the case is scheduled for 21 July 2022.

Claims in relation to sanctions legislation

Two aircraft leasing companies have 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.

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 and financial investment risk (which is shown via market and credit risk) as well as the risk type strategic risk, which is described exclusively in qualitative terms. The risk arising from outsourcing activities is not treated as a separate risk type at HVB Group, but is considered a cross-risk type and is 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). It is planned to develop an alternative location for the Tucherpark site, which was sold. 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.

Facility concepts are drawn up both for Bank-owned properties for own use and the rented properties. Taking into account the above-mentioned premises, the requirements of the divisions and holistic, value-optimised management are the decisive factors for decisions.

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. 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. In terms of HVB Group's real estate risk, the COVID-19 pandemic has essentially led to the postponement of individual disposals due to restrictions.

The Russian-Ukraine conflict and the resulting economic consequences have led to rising costs, especially in the area of energy and construction. It remains to be seen to what extent this trend will continue or whether further effects will be noticeable. Likewise, the effects of the current inflation trend as well as possible consequences of a change in financing interest rates on the development of real estate values cannot yet be estimated.

The economic capital for real estate risk at HVB Group, without taking account of diversification effects between risk types and without the model risk cushion, amounts to €320 million at 30 June 2022, which represents an increase of €7 million (31 December 2021: €313 million). The fully diversified economic capital for real estate risk at HVB Group stands at €149 million (31 December 2021: €147 million).

The risk figures relate to a portfolio valued at €2,811 million.

Breakdown of the real estate portfolio by type

	PORTFOLIO VALUE € millions		SHARE in %	
	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Real estate used by the Bank	2,246	2,227	79.9	80.5
Real estate not used by the Bank	565	539	20.1	19.5
HVB Group	2,811	2,766	100.00	100.00

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 cushion, amounted to €345 million as at 30 June 2022 (31 December 2021: €344 million). The fully diversified economic capital for HVB Group's business risk totals €225 million as at 30 June 2022 (31 December 2021: €225 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 the risks are calculated and monitored at regular intervals using a model devised specifically for pension risk. A risk figure is determined periodically using calculations based on changes in key risk parameters for both the various plan assets and the cash flows on the obligations side. A figure of €1,323 million was determined as at 30 June 2022 for the total pension risk of HVB Group (31 December 2021: €1,555 million). The decrease compared with year-end 2021 is primarily due to a significantly lower assumed shock on investments which offsets a higher assumed potential

interest shock on benefit obligations as a result of an increase in interest rates. The risk figure is incorporated in the calculation of the risk-taking capacity in the form of an additive component in market risk before aggregation as the internal capital. In addition, the impact on pension risk is analysed at regular intervals as part of the crossrisk-type stress tests.

The interest rate level still appears to be the main driver of the risks for the amount of pension obligations reported. Despite the slight increase in yields in recent months, the persistently low yields continue to pose a challenge in generating the returns on investments that can be achieved with an acceptable level of risk. A further increase in yields would reduce the total pension obligations but would also have a negative impact on the valuation of bonds. Furthermore, an increase in volatility in the capital markets could potentially have a negative impact on the asset side.

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 an operating segment or competence line, or deemed non-strategic and connected with the fundamental goal of reduction.

The economic capital from holdings in unlisted companies for financial investment risk at HVB Group is included under credit risk since September 2020.

Risk Report (CONTINUED)

Breakdown of the financial investment portfolio

	PORTFOLIO € millio		SHARE in %	
	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Private equity investments	10	10	4.0	4.0
Other investments ¹	231	229	96.0	96.0
HVB Group	240	239	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 2021 Annual Report still apply. However, if further escalations of the Russia-Ukraine conflict or the spread of new Covid-19 variants lead to considerable disruptions, such as raw material shortages, supply chain or sales problems, and thus to weaker than expected economic growth, there could be an additional impact on HVB Group's earnings situation. Changes in the performance of the overall economy and the ratings of HVB are shown in the 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 regularly analysed with regard to reputational risk ("change-the-bank" approach) and individual units at the Bank are examined at regular intervals regarding 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 Risks and Controls Committee or the head of Non Financial Risk. Under the "run-the-bank" approach, the individual units of the Bank are examined at regular intervals with regard to existing and/or latent reputational risk. For this purpose, senior management is interviewed about current reputational risks. The senior managers then have the opportunity to review the reputational risk identified in their unit and add 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 Risk unit (CRO organisation). The Non Financial Risk unit consolidates the results of the senior management interviews and prepares a yearly RepRisk Report covering the largest 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 corporate 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. UniCredit's method for quantifying reputational risk is based on measuring the semi-elasticity between the development of the Media Tonality Index (a measure, the development of which 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 operational risk of the subsidiary to the capital for the operational risk of UniCredit corporate group" – distributed between the subsidiaries of UniCredit corporate group.

The Non Financial Risk department checks the results obtained from calculating the economic capital for the reputational risk of HVB corporate group on a quarterly basis for their plausibility. 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.

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/material outsourcing contract was concluded by HVB in the first half of 2022. As part of the increase in efficiency, the back-office activities of UniCredit Services S.C.p.A. carried out from Germany were transferred back to HVB with effect from 1 July 2022, thus significantly reducing the scope of the corresponding outsourcing contracts with UniCredit Services S.C.p.A. This did not result in a significant change in the risk.

Consolidated Income Statement

Consolidated Income Statement

INCOME/EXPENSE	NOTE	1/1-30/6/2022	1/1-30/6/2021
Interest income		1,600	1,523
of which calculated using the effective interest method (based on classification according to IFRS 9)		1,138	1,098
Negative interest on financial assets		(159)	(176)
Interest expense		(480)	(479)
Negative interest on financial liabilities		330	299
Net interest	12	1,291	1,167
Dividends and other income from equity investments	13	23	16
Net fees and commissions	14	607	581
Net trading income	15	340	423
Net gains/(losses) on financial assets and liabilities at fair value	16	141	44
Net gains/(losses) on derecognition of financial instruments measured at cost	17	6	(1)
Net other expenses/income	18	(164)	(116)
Payroll costs		(694)	(733)
Other administrative expenses		(590)	(641)
Amortisation, depreciation and impairment losses on intangible and tangible assets		(46)	(58)
Operating costs	19	(1,330)	(1,432)
Net write-downs of loans and provisions for guarantees and commitments	20	29	34
Provisions for risks and charges	21	9	(88)
Restructuring costs		(9)	
Net gains/(losses) on disposals of investments	22	(4)	(11)
PROFIT/(LOSS) BEFORE TAX		939	617
Income tax for the period		(188)	(259)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))		751	358
attributable to the shareholder of UniCredit Bank AG		751	358
attributable to minorities		_	

Earnings per share			(in €)
	NOTE	1/1-30/6/2022	1/1-30/6/2021
Earnings per share (undiluted and diluted)	23	0.94	0.45

	1/1-30/6/2022	1/1-30/6/2021
Profit/(loss) after tax recognised in the income statement (consolidated profit/(loss)	751	358
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)	915	314
Allocation to/withdrawal from the revaluation surplus for owner-occupied property (IAS 16)	29	5
Change in the fair value of financial liabilities at FVTPL attributable to changes in		
the default risk (own credit spread reserve)	16	(30)
Other changes	_	
Taxes on income and expenses not to be reclassified to the income statement in future periods	(10)	(90)
Income and expenses to be reclassified to the income statement in future periods		
Changes from foreign currency translation	10	2
Changes in the measurement of financial instruments (hedge reserve)	(32)	(1)
Unrealised gains/(losses)	(32)	(1)
Gains/(losses) reclassified to the income statement	—	
Changes in the measurement of financial instruments at FVTOCI (FVTOCI reserve)	(29)	3
Unrealised gains/(losses)	(14)	4
Gains/(losses) reclassified to the income statement	(15)	(1)
Other changes	—	(2)
Taxes on income and expenses to be reclassified to the income statement		
in future periods	14	(1)
Total income and expenses recognised in equity through other comprehensive income	913	200
tal comprehensive income	1,664	558
which:		
attributable to the shareholder of UniCredit Bank AG	1,664	558
attributable to minorities		

Consolidated Balance Sheet

			(€ millions)
ASSETS	NOTE	30/6/2022	31/12/2021
Cash and cash balances	24	51,700	27,692
Financial assets held for trading	25	84,766	85,914
Financial assets at FVTPL	26	6,232	7,534
Financial assets at FVTOCI	27	10,294	12,006
Loans and receivables with banks (at cost)	28	30,769	24,620
Loans and receivables with customers (at cost)	29	152,382	148,600
Hedging derivatives	30	302	231
Hedge adjustment of hedged items in the portfolio fair value hedge		173	24
Investments in associates and joint ventures accounted for using the equity method	31	12	12
Property, plant and equipment	32	2,421	2,450
Investment properties	33	334	360
Intangible assets	34	7	8
Tax assets		1,042	909
Current tax assets		167	165
Deferred tax assets		875	744
Non-current assets or disposal groups held for sale	35	650	695
Other assets	36	932	1,138
TOTAL ASSETS		342,016	312,193

			(€ millions)
LIABILITIES	NOTE	30/6/2022	31/12/2021
Deposits from banks	37	70,554	61,707
Deposits from customers	38	150,137	134,340
Debt securities in issue	39	31,470	32,180
Financial liabilities held for trading	40	63,746	53,659
Financial liabilities at FVTPL	41	4,896	5,510
Hedging derivatives	42	272	500
Hedge adjustment of hedged items in the portfolio fair value hedge	43	(3,324)	617
Tax liabilities		1,177	988
Current tax liabilities		625	530
Deferred tax liabilities		552	458
Liabilities of disposal groups held for sale	44	553	565
Other liabilities		1,489	1,586
Provisions	45	1,837	2,751
Shareholders' equity		19,209	17,790
Shareholders' equity attributable to the shareholder of UniCredit Bank AG		17,518	16,099
Subscribed capital		2,407	2,407
Additional paid-in capital		9,791	9,791
Other reserves		4,539	3,589
Currency reserves		26	16
Changes in valuation of financial instruments		4	51
Hedge reserve		(8)	19
FVTOCI reserve		12	32
Profit available for distribution		—	245
Consolidated profit/(loss) 1/1–30/6/20221		751	_
Additional equity instruments		1,700	1,700
Minority interests		(9)	(9)
TOTAL LIABILITIES		342,016	312,193

1 Attributable to the shareholder of UniCredit Bank AG.

The 2021 profit available for distribution disclosed in the annual financial statements of HVB, which forms the basis for the appropriation of profit, amounts to \notin 245 million. On 5 May 2022, the Shareholders' Meeting of HVB adopted a resolution to pay a dividend of \notin 245 million to our sole shareholder UniCredit S.p.A., Milan, Italy. This represents a dividend of around \notin 0.31 per share after around \notin 0.50 for the 2020 financial year. The 2021 profit available for distribution was distributed on 10 May 2022.

Statement of Changes in Shareholders' Equity

		-		OTHER RES	ESERVES OF WHICH	OF WHICH	
					REVALUATION	PENSIONS AND	
	SUBSCRIBED	ADDITIONAL	TOTAL OTHER	OF WHICH OWN CREDIT	RESERVE FOR OWN	SIMILAR OBLIGATIONS	
Shareholders' equity at 1/1/2022	2,407	PAID-IN CAPITAL 9,791	RESERVES 3,589	SPREAD (55)	PROPERTIES 945	(IAS 19) (1,949)	
Consolidated profit recognised in the	4,707	3,101	0,000	(00)	J*10	(יסרט, ו	
consolidated income statement							
Total income and expenses recognised in equity							
through other comprehensive income ⁴			950	11	13	926	
Unrealised gains/(losses) due to changes				· · ·			
in measurement			24	11	13		
Gains/(losses) reclassified to the income statement							
Actuarial gains/(losses) on defined benefit plans			926			926	
Changes from foreign currency translation			920			920	
Other changes							
Total other changes in equity					(6)		
Capital increase					(0)		
Reclassification from equity reserves							
to retained earnings					(6)		
Dividend payouts					(0)		
Payouts on additional equity instruments							
Transfers to/withdrawals from profit							
available for distribution							
Changes in group of consolidated companies							
Changes in group of consolidated companies Capital decreases							
Shareholders' equity as at 30/6/2022	2,407	9,791	4,539	(44)	952	(1,023)	
סוומוסווטועטוס טעעווע עס ער סטיטיבטבב	£,		7,000			(1,020)	
Shareholders' equity as at 1/1/2021	2,407	9,791	3,528	(24)	892	(1,964)	
Consolidated profit/(loss) recognised in the			-,				
consolidated income statement							
Total income and expenses recognised in equity							
through other comprehensive income ⁴			199	(20)	5	214	
Unrealised gains/(losses) due to changes							
in measurement			(15)	(20)	5		
Gains/(losses) reclassified to the income statement		_					
Actuarial gains/(losses) on defined benefit plans			214			214	
Changes from foreign currency translation				_			
Other changes							
Total other changes in equity					(8)	3	
Capital increase							
Reclassification from equity reserves							
to retained earnings				_	(6)		
Dividend payouts							
Payouts on additional equity instruments							
Transfers to/withdrawals from profit							
available for distribution							
Changes in group of consolidated companies					(2)	3	
Capital decreases					·/		
Shareholders' equity as at 30/6/2021	2,407	9,791	3,727	(44)	889	(1,747)	
Slidiellolueis equity as at Solor2021	2,907	3,131	5,121	(++)		(1,141)	

1 The Shareholders' Meeting of 5 May 2022 resolved to distribute the 2021 profit available for distribution in the amount of €245 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €0.30 per share.

The Shareholders' Meeting of 7 June 2021 resolved to distribute the 2020 profit available for distribution in the amount of €400 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy.

This represents a dividend of around €0.50 per share. 2 Attributable to the shareholder UniCredit Bank AG.

3 UniCredit Bank AG (HVB).

4 Recognised through the consolidated statement of total comprehensive income.

(€ millions)

								(€ millions)
_	CHANGE IN MEASURI OF FINANCIAL INSTRU				TOTAL			
CURRENCY RESERVE	HEDGE RESERVE	FVTOCI RESERVE	PROFIT AVAILABLE FOR DISTRIBUTION ¹	CONSOLIDATED PROFIT 1/1-30/6 ²	SHAREHOLDERS' EQUITY ATTRIBUTABLE TO THE SHAREHOLDER OF HVB ³	ADDITIONAL Equity Instruments	MINORITY	TOTAL Shareholders' Equity
16	19	32	245	1/1-30/0	16,099	1,700	(9)	17,790
10	15	52	243		10,035	1,700	(3)	17,750
				751	751			751
				701				
10	(27)	(20)			913			913
	(=)	(20)			010			010
	(27)	(9)	_		(12)			(12)
		(11)			(11)			(11)
					926			926
10	_	_	_		10			10
	_	_	_		_		_	_
_	_	_	(245)		(245)		_	(245)
_	_	_	_	_			_	_
_	_	_	_		_	_	_	_
	_		(245)		(245)		_	(245)
—	—	—	_	—	—	—	_	—
—	—	—	—	—	—	—	_	—
—	—	—	—	—	_	—	—	—
		_	_	_				—
26	(8)	12		751	17,518	1,700	(9)	19,209
9	21	29	400	_	16,185	1,700	(10)	17,875
				358	358	_		358
2	(3)	2			200			200
	(1)	3			(13)			(13)
		(1)			(1)			(1)
					214			214
2					2			2
—	(2)		(400)		(2)			(2)
	—		(400)		(400)			(400)
			(400)		(100)			(400)
			(400)		(400)			(400)
								_
	18	31		358	16,343	1,700	(10)	18,033
	10	01		000	10,040	1,700	(10)	10,000

Consolidated Cash Flow Statement (abridged version)

		(€ millions)
	2022	2021
Cash and cash equivalents at 1/1	27,692	47,531
Cash flows from operating activities	22,983	254
Cash flows from investing activities	51	(34)
Cash flows from financing activities	974	(218)
Effects of exchange rate changes	_	—
Less non-current assets or disposal groups held for sale	_	—
Cash and cash equivalents at 30/6	51,700	47,533

Legal Basis

UniCredit Bank AG (HVB) is a universal bank with its registered office and principal place of business in Arabellastrasse 12, Munich. It is filed under HRB 42148 in the B section of the Commercial Register maintained by Munich District Court. HVB is an affiliated company of UniCredit S.p.A., Milan, Italy (ultimate parent company).

As a universal bank, HVB with its subsidiaries is one of the leading providers of banking and financial services in Germany. It offers a comprehensive range of banking and financial products and services to private, corporate and public-sector customers, international companies and institutional customers.

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 AG 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 relate to the reporting date of 30 June of the reporting year or to 31 December of the previous year for disclosures regarding balance sheet items and totals and to the period from 1 January to 30 June of the respective year for disclosures regarding the income statement.

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 principles of accounting and valuation.

3 Consistency

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

The present Half-yearly Financial Report for 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 above, the accounting and measurement methods have been applied unchanged compared with the previous year. These are described in the notes to the consolidated financial statements in the 2021 Annual Report.

UniCredit Leasing GmbH

Against the backdrop of current market developments (the increase in interest rates in particular) the general conditions deteriorated in the first half of 2022 for a potential purchaser of UniCredit Leasing GmbH with its subsidiaries. As a result, the initiated sales process was unable to be brought to a close. In the second quarter of 2022, HVB therefore decided to end the sales process and to keep UniCredit Leasing GmbH with its subsidiaries. Compliant with IFRS 5.28 requirements for the sales process of subsidiaries, HVB retrospectively reclassified UniCredit Leasing GmbH with its subsidiaries which means that the current and earlier financial years are presented as though UniCredit Leasing GmbH with its subsidiaries had not been classified as non-current assets or disposal groups held for sale as at year-end 2021. This adjustment is explained below, otherwise the consolidated financial statements are presented after retrospective adjustment and no further reference is made to this change.

Following the measurement rule of IFRS 5.27, the assets and liabilities of UniCredit Leasing GmbH with its subsidiaries are recognised on the basis of the amortised acquisition cost at the time before these were classified as non-current assets or disposal groups held for sale as at year-end 2021. The scheduled depreciation and amortisation on non-current assets that was suspended from 1 January 2022 will be taken retrospectively and the write-downs on operating leases and finance lease receivables recognised as at year-end 2021 will be reversed as these write-downs were not due to impairments relating to the respective assets but to the expected lower selling price for the disposal group of assets and liabilities as a whole. As UniCredit Leasing GmbH with its subsidiaries is not a cash generating unit or a business area from HVB's perspective, the measurement of the assets and liabilities concerned is to be based on the principle of individual measurement.

The previous-year figures were subsequently adjusted so that the write-down of UniCredit Leasing GmbH with its subsidiaries to the lower expected sales proceeds recognised in the income statement in the 2021 financial year was reversed. As a result, net other expenses/income is €81 million higher. In addition, the assets and liabilities of UniCredit Leasing GmbH with its subsidiaries are again shown under the respective balance sheet item as at 31 December 2021 and not as non-current assets or disposal groups held for sale or as liabilities of disposal groups held for sale.

(€ millions)

	CARRYING AMOUNT RECOGNISED AS AT 31/12/2021 IN THE 2021 CONSOLIDATED FINANCIAL STATEMENTS	ADJUSTMENT OF PREVIOUS-YEAR FIGURES	CARRYING AMOUNT RECOGNISED AS AT 31/12/2021 IN THE 2022 CONSOLIDATED FINANCIAL STATEMENTS
ASSETS			
Loans and receivables with banks (at cost)	24,620		24,620
Loans and receivables with customers (at cost)	146,794	1,806	148,600
Hedge adjustment of hedged items in the portfolio fair value hedge	24	_	24
Property, plant and equipment	2,356	94	2,450
Intangible assets	4	4	8
Tax assets	908	1	909
Non-current assets or disposal groups held for sale	2,519	(1,824)	695
Other assets	1,138		1,138
LIABILITIES			
Deposits from banks	61,250	457	61,707
Deposits from customers	134,340	_	134,340
Tax liabilities	980	8	988
Liabilities of disposal groups held for sale	1,068	(503)	565
Other liabilities	1,565	21	1,586
Provisions	2,734	17	2,751
Shareholders' equity	17,709	81	17,790

Deferred taxes

In the context of measuring deferred tax assets, it is necessary to check whether sufficient taxable profits will be generated that can be offset against deductible temporary differences, tax losses or tax credits not yet used (impairment test for deferred tax assets). A planning horizon of five years was taken as a basis for determining whether there will be sufficient taxable profits in relation to the same tax authority and the same taxable entity in the period in which the deductible temporary difference is reversed. In the course of checking whether the five-year planning horizon is still appropriate, HVB found that the reasons for limiting the period no longer apply. Therefore, the period was extended to cover the total term of the deductible temporary differences. Compliant with IAS 8.38 the effects from the adjustment of this estimate are prospectively recognised so that income of €131 million is recognised in the income statement under the "Income tax for the period" item and an amount of €301 million through other comprehensive income under the "Taxes on income and expenses not to be reclassified to the income statement in future periods" item in the first half of 2022.

Extension of the low credit exemption (investment grade) of securities to loans

To date, HVB has only applied the general assumption to securities that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument has a low risk of default at the reporting date (IFRS 9.5.5.10). In the first half of the year, loan receivables were also included in this exemption, which resulted in income of ϵ 4 million. Due to the immateriality of the effect, the previous-year figures were not adjusted accordingly, which means that the transition was recognised prospectively in profit or loss in the first half of 2022.

Renaming of the item "Credit impairment losses IFRS 9" to "Net write-downs of loans and provisions for guarantees and commitments"

HVB changed the name of the income statement item "Credit impairment losses IFRS 9" to "Net write-downs of loans and provisions for guarantees and commitments", however there is no change to the content of this item.

Accounting and Valuation (CONTINUED)

4 Initial adoption of new IFRS accounting rules

New standards and interpretations

No new standards or interpretations issued by the IASB were subject to mandatory application in the EU for the first time in the 2022 financial year.

Amendments to existing standards and interpretations

The amendments to the following standards and interpretations revised by the IASB are subject to mandatory application in the EU for the first time in the 2022 financial year:

- Amendments to IFRS 3 "Business Combinations" Reference to the Conceptual Framework (issued on 14 May 2020/adopted into European law on 28 June 2021).
- Amendments to IAS 16 "Property, Plant and Equipment" Proceeds before Intended Use (issued on 14 May 2020/adopted into European law on 28 June 2021).
- Amendments to IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" Onerous Contracts: Cost of Fulfilling a Contract (issued on 14 May 2020/adopted into European law on 28 June 2021).
- Annual Improvements to the IFRS (Cycle 2018-2020) with minor amendments to IFRS 1 "First-time Adoption of IFRS", IFRS 9 "Financial Instruments", IFRS 16 "Leases" (Illustrative Example) and IAS 41 "Agriculture" (issued on 14 May 2020/adopted into European law on 28 June 2021).
- Amendments to IFRS 16 "Leases" COVID-19-Related Rent Concessions after 30 June 2021 (issued on 31 March 2021/adopted into European law on 30 August 2021). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 April 2021. Therefore, HVB Group will apply this amendment for the first time in the 2022 financial year.

HVB Group implemented the amended accounting principles. Unless the effects of this implementation 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 the subject of mandatory adoption and that have not been the subject of early adoption

HVB Group has decided against the voluntary early adoption of the standards and interpretations adopted or revised by the IASB, which are subject to mandatory adoption for the 2023 financial year or thereafter. HVB Group will adopt these standards and interpretations in the financial year in which the new rules in question become mandatorily applicable for EU-based enterprises for the first time.

The EU has adopted the following into European law:

- IFRS 17 "Insurance Contracts" (issued on 18 May 2017/adopted into European law on 19 November 2021) including the amendments to IFRS 17 (issued on 25 June 2020/adopted into European law on 19 November 2021). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.
- Amendments to IAS 1 "Presentation of Financial Statements" and to the IFRS Practice Statement 2 Disclosures of Accounting Policies (issued on 12 February 2021/adopted into European law on 2 March 2022). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.
- Amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" Definition of Accounting Estimates (issued on 12 February 2021/adopted into European law on 2 March 2022). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.

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

- Amendments to IAS 1 "Presentation of Financial Statements" Classification of Liabilities as Current or Non-current (issued on 23 January 2020) and Classification of Liabilities as Current or Non-current: Deferral of Effective Date (issued on 15 July 2020). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.
- Amendments to IAS 12 "Income Taxes" Deferred Tax related to Assets and Liabilities arising from a Single Transaction (issued on 7 May 2021). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.
- Amendments to IFRS 17 "Insurance Contracts" First-time adoption of IFRS 17 and IFRS 9 Comparative Information (issued on 9 December 2021). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.

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

No companies were newly added to the group of companies included in consolidation in the first half of 2022.

The following companies left the group of companies included in consolidation in the first half of 2022 due to accrual, imminent or completed liquidation or loss of control:

- Acis Immobilien- und Projektentwicklungs GmbH & Co. Oberbaum City KG, Grünwald
- GELDILUX-TS-2015 S.A., Luxembourg
- H.F.S. Leasingfonds Deutschland 1 GmbH & Co. KG (Immobilienleasing), Munich
- HVB Capital LLC, Wilmington, Delaware
- HVB Capital LLC II, Wilmington, Delaware
- HVB Capital LLC III, Wilmington, Delaware
- HVB Funding Trust, Wilmington, Delaware
- HVB Funding Trust II, Wilmington, Delaware
- HVB Funding Trust III, New York
- Wealthcap Objekt Berlin III GmbH & Co. KG, Munich
- Wealthcap Spezial Wohnen 1 Komplementär GmbH, Munich
- Wealthcap Wohnen 1b GmbH & Co. KG, Munich

The following companies left the group of companies included in consolidation in the first half of 2022 for reasons of materiality:

- HAWA Grundstücks GmbH & Co. OHG Hotelverwaltung, Munich
- MOC Verwaltungs GmbH & Co. Immobilien KG, Munich
- NF Objekte Berlin GmbH, Munich
- Sirius Immobilien- und Projektentwicklungs GmbH, Munich
- Solos Immobilen- und Projektentwicklungs GmbH & Co. Sirius Beteiligungs KG, Munich

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 0.002% as at 31 December 2021.

Segment Reporting

7 Changes in segment reporting

In the course of the first half of 2022, HVB Group aligned its internal management with UniCredit's management. HVB Group is therefore managed internally on the basis of the same parameters also used to manage HVB Group from UniCredit's perspective. Consequently, HVB Group is UniCredit's "Germany" segment. The uniform management concepts increase the transparency of the HVB subgroup's financial statements, as the information provided in HVB Group's segment reporting is compatible with the information that UniCredit communicates to the capital market.

HVB Group is thus divided into the following operating segments as at 30 June 2022:

- Retail
- Corporates
- Other

The adjustment made in the first half of 2022 mainly concerns the new structure of the operating segments. The presentation of the segmented income statement has remained largely unchanged compared with the previous year. The differences between the segmented income statement and the income statement are addressed in the reconciliation. The changes in recognition in the first half of 2022 relate to the following items:

- Losses from the closing of derivatives on account of the sanctions imposed on Russian banks are not shown under net trading income but instead under net write-downs of loans and provisions for guarantees and commitments (€94 million); this only affects the first half of 2022
- Reallocation of the share in commission in connection with the placement of securities and derivatives in the amount of €58 million from net trading income to net fees and commissions in the reporting period (previous-year period: €41 million)
- Elimination of €43 million in net write-downs of loans and provisions for guarantees and commitments posted in HVB for group-affiliated companies in Russia, as this is an internal group matter from the Group's perspective which is eliminated in the course of consolidation and is therefore irrelevant for tax purposes (only concerns the reporting period)
- Reallocation of interest expense for pension provisions in the amount of €4 million from payroll costs to interest expense in the reporting period (previous-year period: €6 million)
- The calculation of the return on investment for the average tied core capital has been changed such that the base rate according to the book of own funds plus a premium in the amount of the average spread curve for the medium- and long-term lending business of HVB Group is now only applied to the average tied core capital in respect of credit risk and no longer to the total average tied core capital. Only the base rate according to the book of own funds is now applied to the remaining average tied core capital calculated
- Imputed cost of equity, for which an amount of €8 million was recognised in the previous-year period, has not been charged

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 facts 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 Management 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 the profitability. In this context, the segment data are determined in accordance with International Financial Reporting Standards (IFRS). 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 delimited by 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 expenses. 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 13.00% (previous year: 12.00%) of core capital from 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. Like in the previous year, it amounts to 0.49% in the 2022 financial year. 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 percentage rate changed to 0.40% in the 2022 financial year after 0.43% in the previous year. 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 appropriate operating segment according to causation. The Operations Germany (COO), Chief Digital & Information Officer (CDIO) and Corporate Center business 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.

Segment Reporting (CONTINUED)

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 and standardised products and advice in all areas of demand. The Private business area bundles wealth management and private banking customers.

In the retail customer business, HVB's financial concept promotes a high standard of quality in advisory 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 business customer segment, we offer our customers a full range of services in corporate and private financial and asset issues whereby customers are set to benefit 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 further developed on an ongoing basis. The Smart Banking service model used in this context is based on the seamless integration of the branch network as well as remote and digital channels for customers requiring standardised products and services.

In line with the universal bank model, the range of products and services of the Retail operating segment enables comprehensive customer support to be provided. 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, such as insolvency administrators or public sector workers, are being continuously refined and special advisory services are offered, like in the Mergers & Acquisitions business area.

The Large Corporates business area covers large corporate customers requiring highly complex services who are managed in the Industry Coverage sub-area. The quality of service in this sub-area lies in exploiting our strengths – our wide range of products, in-depth sector know-how and creation of customised customer solutions – in our customer relationships whilst assuming a leading core bank role. Our range of products extends from payment products, business loans, foreign trade financing for corporate customers, brokerage of insurance products through to advisory services for initial public offerings and M&A transactions, ESG products as well as liquidity and financial risk management.

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 Financial Institutions business, 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, UniCredit's global product factory:

- Specialised Lending (SL) provides access to financial services with a diversified range of products that extends from core banking relationship
 products through to highly specialised and structured financing.
- Advisory & Capital Markets (A&CM) offers our customers access to market-leading capital procurement and advisory services by combining M&A expertise with content creation at industry sector level.
- Transactions & Payments offers a broad array of innovative products in the areas of cash management, trade finance and working capital, thus meeting customer needs in connection with transactions in the areas of payment services, account information, optimisation of cash flows and operating resources, liquidity management and 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.

Other business area

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

The COO business area sees itself as a central internal service provider for the Bank's day-to-day operations. While the Bank's sales units conclude business transactions with customers, the COO business area attends to the further handling of internal processes insofar as these are within its remit. The activities of the COO cover core banking and investment banking operations. In addition, the COO business area is responsible for the preventive protection of data of the Bank's customers, employees, assets and processes, strategic real estate management, logistics, cost management, outsourcing and third-party management as well as accounting. Payments, securities settlement, back-office processing, purchasing and facility management are purchased from outside sources and managed through what is known as the Retained Organisation functions in COO.

CDIO manages the entire digital transformation of HVB. The division supports the achievement of business and corporate objectives vis-à-vis customers and employees and fosters a digital culture within HVB Group through targeted initiatives with internal and external stakeholders. CDIO bears overall responsibility for the digital agenda for retail and corporate customers, including steering the digital roadmap, creating a state-of-the-art customer experience across all channels (e.g. online, app, remote, smart banking, branches) and digital products (e.g. accounts and payments, lending, deposits and investments as core banking products) and provides support in simplifying related products.

CDIO is responsible for promoting and coordinating the implementation of the data strategy, supporting relevant functions relating to data architectures and products, developing local data products and enabling the dissemination of analytical skills for both the retail and the corporate customer business. CDIO protects HVB's digital services against risks in connection with information security threats in line with the Group's digital security strategy and at the same time fosters the introduction of best practices for cyber security. Further focal points are the management and control of the most important IT governance processes, the central unit for simplifying processes, contract management with cross-divisional partners and monitoring products and services provided to HVB Group by the Group's IT structures.

The Corporate Center includes the Finance, CRO (Chief Risk Office) and CEO (Chief Executive Office) business units as well as profits and losses generated by other banking activities, consolidated subsidiaries and non-consolidated holdings that are not assigned to any other business area. Furthermore, this business area incorporates the net income from securities portfolios for which the Management Board is responsible. It also contains amounts from decisions taken by management with regard to asset/liability management. In addition, the Corporate Center business area incorporates the Real Estate Restructuring customer portfolio.

Treasury is responsible for funding, interest rate management and cash pooling. 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 are contained under the disclosures regarding the income statement in these notes to the consolidated financial statements.

Segment Reporting (CONTINUED)

10 Income statement, broken down by operating segment

INCOME/EXPENSES	RETAIL	CORPORATES	OTHER	HVB GROUP
Net interest	334	858	82	1,274
Dividends and other income from equity investments	_	2	_	2
Net fees and commissions	271	384	(12)	643
Net trading income	21	440	103	564
Net other expenses/income	8	24	36	68
OPERATING INCOME	634	1,708	209	2,551
Payroll costs	(184)	(253)	(248)	(685)
Other administrative expenses	(298)	(482)	229	(551)
Amortisation, depreciation and impairment losses on intangible and tangible assets	3	(6)	(42)	(45)
Operating costs	(479)	(741)	(61)	(1,281)
OPERATING PROFIT/(LOSS)	155	967	148	1,270
Net write-downs of loans and provisions for guarantees and commitments	(23)	55	(61)	(29)
NET OPERATING PROFIT/(LOSS)	132	1,022	87	1,241
Provisions for risks and charges	(8)	(240)	(10)	(258)
Restructuring costs	—	(6)	(3)	(9)
Net income from investments	(3)	1	10	8
PROFIT/(LOSS) BEFORE TAX	121	777	84	982
Income tax for the period	(28)	(209)	(13)	(250)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	93	568	71	732
attributable to the shareholder of UniCredit Bank AG	93	568	71	732
attributable to minorities				

Reconciliation of the segmented income statement to the income statement from 1 January to 30 June 2022

	INCOME STATEMENT, BROKEN DOWN BY OPERATING	RECLASSI-	ACCOUNTING AND VALUATION	CONSOLIDATED INCOME
INCOME/EXPENSES	SEGMENT	FICATION	DIFFERENCES	STATEMENT
Net interest	1,274	19		1,291
Reallocation of net interest from specific held-for-trading portfolios		14		
Compounding of provisions and of provisions for contingent liabilities		1		
Interest expense for pension provisions		4		
Dividends and other income from equity investments	2	21		23
Dividends from assets mandatorily at FVTPL		21		
Net fees and commissions	643	(37)		607
Expense for purchased securities services for held-for-trading portfolios		21		
Share of commission from the placement of securities and derivatives		(58)	_	
Net trading income	564	(224)		340
Financial assets mandatorily at FVTPL		43		
Financial liabilities designated at FVTPL		75	_	
Net gains/(losses) on the sale of securities				
(held-for-sale business model)		(16)	_	
Hedge accounting effects		(244)	_	
Fair value measurement of equity instruments		1	_	
Buy-backs of securities issued – recognised at cost		(4)		
Net gains/(losses) on the sale of performing securities				
(hold-to-maturity business model)		(2)	_	
Dividends from assets mandatorily at FVTPL		(21)	_	
Reallocation of net interest from specific held-for-trading portfolios		(14)	_	
Closing costs for derivatives with Russian banks		(94)	_	
Share of commission from the placement of securities and derivatives		58	_	
Net gains/(losses) on the sale of non-performing securities				
(hold-to-maturity business model)		(6)		
Net gains/(losses) on financial assets and liabilities at fair value	n/a	141		141
Financial assets mandatorily at FVTPL		(43)		
Financial liabilities designated at FVTPL		(75)		
Net gains/(losses) on the sale of securities (held-for-sale business model)		16		
Hedge accounting effects		244		
Fair value measurement of equity instruments		(1)		
Net gains/(losses) on derecognition of financial instruments measured at cost	n/a	6		6
Net gains/(losses) on the sale of performing loans and receivables,	11/4	0		
and securities (hold-to-maturity business model)		2		
Buy-backs of securities issued – recognised at cost		4		
Net other expenses/income	68	(241)	8	(164)
Net gains/(losses) on the sale of performing loans and receivables	00	(241)	U	(104)
(hold-to-maturity business model)				
Income from the valuation/disposal of investment properties				
and operating leases		(0.41)		
European bank levy		(241)		
Other effects				
Adjustment of managerial scope of consolidation	0.554	(045)	8	
OPERATING INCOME	2,551	(315)	8	2,244

(€ millions)

Segment Reporting (Continued)

Reconciliation of the segmented income statement to the income statement

INCOME/EXPENSES	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSI- FICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Payroll costs	(685)	(4)	(5)	(694)
Adjustment of managerial scope of consolidation		_	(5)	
Interest expense for pension provisions		(4)	_	
Other administrative expenses	(544)	(42)	(2)	(590)
Adjustment of managerial scope of consolidation		_	(2)	
Deposit insurance scheme		(25)	_	
Other effects		_	_	
Expense for purchased securities services for held-for-trading portfolios		(21)	_	
Depreciation on leasehold improvements in buildings		4		
Amortisation, depreciation and impairment losses on intangible				
and tangible assets	(52)	6	_	(46)
Depreciation on leasehold improvements in buildings		(4)		
Net write-ups and write-downs on land and buildings		10		
Operating costs	(1,281)	(40)	(7)	(1,330)
OPERATING PROFIT/(LOSS)	1,270	(355)	1	914
Net write-downs of loans and provisions for guarantees and commitments	(29)	101	(43)	29
Impairment/writebacks of securities at cost and at FVTOCI		1		
Net gains/(losses) on the sale of non-performing securities				
(hold-to-maturity business model)		6		
Compounding of provisions for contingent liabilities		_		
Closing costs for derivatives with Russian banks		94		
Valuation allowances relating to group-affiliated companies in Russia		_	(43)	
NET OPERATING PROFIT/(LOSS)	1,241	(254)	(42)	943
Provisions for risks and charges	(258)	265		9
European bank levy and deposit guarantee scheme	(===)	266		
Compounding of provisions		(1)		
Irrevocable payment commitments provided for bank levy and		(-)		
deposit guarantee scheme recognised as an expense				
Restructuring costs	(9)			(9)
Net income from investments	8	(7)	(1)	(0)
Impairment/write-backs of debt securities at cost and at FVTOCI		(1)		
Income from the valuation/disposal of investment properties and operating leases				
Net gains/(losses) on disposals of investments		4	(1)	
Net write-ups and write-downs on land and buildings		(10)		
Net gains/(losses) on disposals of investments	n/a	(10)		(4)
PROFIT/(LOSS) BEFORE TAX	982	(1)	(43)	939
Income tax for the period	(250)		62	(188)
Tax on valuation allowances relating to group-affiliated companies in Russia	(200)			(100)
Differences arising from the adjustment of the estimated		· · · · · · · · · · · · · · · · · · ·		
deferred taxes between UniCredit and HVB			62	
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	732		19	751
attributable to the shareholder of UniCredit Bank AG	132		19	131
attributable to minorities			13	

INCOME/EXPENSES	RETAIL	CORPORATES	OTHER	HVB GROUP
Net interest	316	763	84	1,163
Dividends and other income from equity investments		10	_	10
Net fees and commissions	262	350	(11)	601
Net trading income	19	405	11	435
Net other expenses/income	14	(1)	29	42
OPERATING INCOME	611	1,527	113	2,251
Payroll costs	(199)	(266)	(256)	(721)
Other administrative expenses	(328)	(506)	234	(600)
Amortisation, depreciation and impairment losses				
on intangible and tangible assets	2	(6)	(43)	(47)
Operating costs	(525)	(778)	(65)	(1,368)
OPERATING PROFIT/(LOSS)	86	749	48	883
Net write-downs of loans and provisions for guarantees and commitments	(12)	38	3	29
NET OPERATING PROFIT/(LOSS)	74	787	51	912
Provisions for risks and charges	(27)	(272)	(13)	(312)
Restructuring costs	—	(1)	_	(1)
Net income from investments	(3)	_	14	11
PROFIT/(LOSS) BEFORE TAX	44	514	52	610
Income tax for the period	(16)	(224)	(19)	(259)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	28	290	33	351
attributable to the shareholder of UniCredit Bank AG	28	290	33	351
attributable to minorities	_	_	_	_

Segment Reporting (CONTINUED)

INCOME/EXPENSES	1/1-30/6/2022	1/1-30/6/2021
Net interest	334	316
Dividends and other income from equity investments	_	
Net fees and commissions	271	262
Net trading income	21	19
Net other expenses/income	8	14
OPERATING INCOME	634	611
Payroll costs	(184)	(199)
Other administrative expenses	(298)	(328)
Amortisation, depreciation and impairment losses on intangible and tangible assets	3	2
Operating costs	(479)	(525)
OPERATING PROFIT/(LOSS)	155	86
Net write-downs of loans and provisions for guarantees and commitments	(23)	(12)
NET OPERATING PROFIT/(LOSS)	132	74
Provisions for risks and charges	(8)	(27)
Restructuring costs	—	
Net income from investments	(3)	(3)
PROFIT/(LOSS) BEFORE TAX	121	44
Income tax for the period	(28)	(16)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	93	28
attributable to the shareholder of UniCredit Bank AG	93	28
attributable to minorities	_	
Cost-income ratio in % (Ratio of operating costs to operating income)	75.6	85.9

In the first half of 2022, the Retail operating segment generated an operating profit (before net write-downs of loans and provisions for guarantees and commitments) of \in 155 million, which is thus a sharp \in 69 million, or 80.2%, higher than the previous year's level.

Operating income, at \in 634 million, was a marked \notin 23 million, or 3.8%, up on the previous year's level of \notin 611 million. Despite the still very low levels of interest rates, net interest of \notin 334 million contained in operating income was a notable \notin 18 million or 5.7% higher than the figure of \notin 316 million recorded in the previous-year period. The lending business was kept stable, with a weaker consumer lending business being compensated by a further marked rise in the real estate financing business. By contrast, there was a sharp increase in net interest from deposit-taking operations: On the one hand, the improved interest rate levels supported this development and on the other hand, the persisting negative interest was increasingly able to be passed onto customers.

Compared with the previous-year period, net fees and commissions increased a notable €9 million, or 3.4%, to €271 million. This is primarily attributable to a marked increase in the securities business in the first quarter of 2022 and also to considerably higher income generated with financial and transactional banking services.

There was a significant increase of $\in 2$ million in net trading income, which was up from $\in 19$ million in the previous-year period to $\in 21$ million in the reporting period.

Net other expenses/income reports income of $\in 8$ million for the reporting period. As a result of non-recurrent effects in 2021, this represents a sharp decrease of $\in 6$ million compared with income of $\in 14$ million in the previous-year period.

Compared with the previous-year period, operating costs fell significantly by €46 million, or 8.8%, to €479 million in the first half of 2022. This is largely due to other administrative expenses which, compared with the same period of the previous year, were down by a sharp €30 million, or 9.1%, to €298 million on the back of lower costs of marketing, IT and back-office activities in particular. Payroll costs were also down a marked €15 million, or 7.5%, to €184 million.

The cost-income ratio fell significantly to 75.6% in the current reporting period compared with 85.9% in the previous-year period.

At €23 million, the item "Net write-downs of loans and provisions for guarantees and commitments" shows a sharp increase of €11 million in net additions compared with the figure of €12 million in the previous-year period.

Net operating profit of €132 million was a substantial €58 million higher than the profit of €74 million generated in the previous-year period.

In the reporting period, there was a net expense of €8 million from provisions for risks and charges compared with the €27 million in the previous-year period. This is mainly due to the provision set aside in 2021 to cover the consequences of the BGH judgement on the invalidity of certain clauses contained in general business conditions and to the reversal of product provisions no longer required in 2022.

Net income from investments reports a negative result of €3 million in both the reporting period and in the same period of the previous year.

Overall, the Retail operating segment generated profit before tax of €121 million in the reporting period, which is considerably higher than the previousyear figure of €44 million as a result of the marked increase in operating income and the significant decline in operating costs.

At €28 million, income tax for the period shows a sharp increase in tax expense in the reporting period compared with a tax expense of €16 million in the previous-year period.

The Retail operating segment reports a profit after tax of \in 93 million for the reporting period, which is significantly higher than the profit after tax of \in 28 million in the previous-year period.

Segment Reporting (CONTINUED)

INCOME/EXPENSES	1/1-30/6/2022	1/1-30/6/2021
Net interest	858	763
Dividends and other income from equity investments	2	10
Net fees and commissions	384	350
Net trading income	440	405
Net other expenses/income	24	(1)
OPERATING INCOME	1,708	1,527
Payroll costs	(253)	(266)
Other administrative expenses	(482)	(506)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(6)	(6)
Operating costs	(741)	(778)
OPERATING PROFIT/(LOSS)	967	749
Net write-downs of loans and provisions for guarantees and commitments	55	38
NET OPERATING PROFIT/(LOSS)	1,022	787
Provisions for risks and charges	(240)	(272)
Restructuring costs	(6)	(1)
Net income from investments	1	_
PROFIT/(LOSS) BEFORE TAX	777	514
Income tax for the period	(209)	(224)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	568	290
attributable to the shareholder of UniCredit Bank AG	568	290
attributable to minorities	—	
Cost-income ratio in % (Ratio of operating costs to operating income)	43.4	50.9

The Corporates operating segment generated operating income of \in 1,708 million in the reporting period, which was thus up a substantial 11.9% on the income of \in 1,527 million in the previous-year period.

The key factor for this development in the first half of 2022 is the sharp rise of \in 95 million to \in 858 million in net interest compared with the previous-year period. This figure was driven by an increase in lending volumes with spreads remaining almost stable, higher custody fees for customer deposits and a reduction in negative market interest rates for deposits.

The item "Dividends and other income from equity investments" totalled €2 million (previous-year period: €10 million).

Net fees and commissions increased significantly by \in 34 million, or 9.7%, to \in 384 million in the reporting period compared with the previous-year figure of \in 350 million. This development is based on higher income from the placement of structured products and brokerage.

There was a significant rise of €35 million to €440 million in net trading income compared with the previous-year period. This was mainly due to income from an exceptionally strong derivatives business (especially commodity derivatives) that more than compensated the negative impact of valuation adjustments.

Net other expenses/income shows income of €24 million, whereas an expense of €1 million was reported in the previous-year period. This positive development is largely attributable to income from the premature termination of lease agreements and to return flows from debtor warrants of previously consolidated companies.

At \in 741 million in the reporting period, operating costs are a notable \in 37 million or 4.8% lower than the \in 778 million recorded for the same period in the previous year. There was a distinct decline of \in 13 million, or 4.9%, to \in 253 million in payroll costs. Other administrative expenses of \in 482 million also fell a marked 4.7% compared with the previous-year period. At \in 6 million, depreciation and amortisation remained at the previous year's level.

Due to the considerably higher earnings, the cost-income ratio fell to 43.4% in the reporting period after 50.9% in the previous-year period.

With a net reversal of \in 55 million, the item "Net write-downs of loans and provisions for guarantees and commitments" improved sharply by \notin 17 million compared with the \in 38 million in the previous-year period. This development is primarily attributable to high net reversals of net write-downs of loans and provisions for guarantees and commitments (mainly in the area of large corporates).

Net operating profit recognised in the current reporting period totals €1,022 million, which is €235 million higher than the profit of €787 million generated in the previous-year period.

There were net provisions for risks and charges of \notin 240 million in the reporting period after \notin 272 million in the previous-year period. This decline is due to the setting aside of a provision for the fine imposed for infringing cartel law in connection with trading in EU government bonds in 2021 which more than compensates the higher payments to the SRF (European bank levy) in 2022.

Restructuring costs were up by €5 million, rising from €1 million in the previous-year period to €6 million in the reporting period.

Net income from investments reports income of €1 million in the reporting period.

The Corporates operating segment generated profit before tax of \in 777 million in the reporting period, which is thus significantly higher than the previous year's profit of \in 514 million.

At \leq 209 million, income tax for the period shows a notable decline in tax expense in the reporting period compared with a tax expense of \leq 224 million in the previous-year period.

The Corporates operating segment reports profit after tax of €568 million for the reporting period compared with the profit of €290 million in the previous-year period.

Segment Reporting (CONTINUED)

INCOME/EXPENSES	1/1-30/6/2022	1/1-30/6/2021
Net interest	82	84
Dividends and other income from equity investments	_	
Net fees and commissions	(12)	(11)
Net trading income	103	11
Net other expenses/income	36	29
OPERATING INCOME	209	113
Payroll costs	(248)	(256)
Other administrative expenses	229	234
Amortisation, depreciation and impairment losses on intangible and tangible assets	(42)	(43)
Operating costs	(61)	(65)
OPERATING PROFIT/(LOSS)	148	48
Net write-downs of loans and provisions for guarantees and commitments	(61)	3
NET OPERATING PROFIT/(LOSS)	87	51
Provisions for risks and charges	(10)	(13)
Restructuring costs	(3)	_
Net income from investments	10	14
PROFIT/(LOSS) BEFORE TAX	84	52
Income tax for the period	(13)	(19)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	71	33
attributable to the shareholder of UniCredit Bank AG	71	33
attributable to minorities	_	
Cost-income ratio in % (Ratio of operating costs to operating income)	29.2	57.5

The Other operating segment generated operating income of \notin 209 million in the reporting period, which is thus a sharp \notin 96 million, or 85.0%, higher than the figure of \notin 113 million reported in the previous-year period.

At \in 82 million, net interest is \in 2 million lower compared with the previous-year period. Higher interest expense on deposits in CEE currencies (e.g. roubles and Turkish lira) and lower early repayment penalties of \in 6 million had an adverse effect in the reporting period (previous-year period: \in 19 million). A non-recurrent effect of \in 42 million from a change in the interest rate on additional tax payments in the CC business area had a positive effect.

At ≤ 103 million, net trading income rose sharply by ≤ 92 million compared with the figure of ≤ 11 million reported in the previous-year period. The rise is largely due to write-ups on financial instruments measured at fair value, income from FX swaps serving to hedge deposits in CEE currencies and the closing of derivative transactions with Russian counterparties.

The notable decline in operating costs of €4 million to €61 million is largely due to the decline in payroll costs in connection with a lower headcount.

The Other operating segment generated operating profit of \in 148 million in the reporting period, which thus improved by a very substantial \in 100 million compared with the \in 48 million reported in the previous-year period.

On account of the sharp increase in operating income and the slight decline in operating costs, the cost-income ratio fell to 29.2% in the reporting period after 57.5% in the previous-year period.

The "Net write-downs of loans and provisions for guarantees and commitments" item reports a net addition of \in 61 million compared with a net reversal of \in 3 million in the previous-year period. This development is mainly driven by credit losses of \in 75 million in connection with the closing of derivatives with Russian banks.

Net operating profit thus comes to €87 million, which is a very substantial €36 million improvement on the profit of €51 million reported in the previousyear period.

Provisions for risks and charges show an expense of €10 million in the reporting period and are thus considerably lower than the amount of €13 million recognised in the previous-year period.

Restructuring costs total €3 million in the reporting period; no restructuring costs were recorded in the previous-year period.

At €10 million, net income from investments posted a significant decline of €4 million compared with the previous-year period, largely due to the valuation of real estate.

Overall, the Other operating segment generated a sharp increase in profit before tax of \in 84 million in the reporting period compared with the profit before tax of \in 52 million in the previous-year period.

Income tax for the period fell a very substantial €13 million in the reporting period after a tax expense of €19 million in the previous-year period.

The Other operating segment reports consolidated profit of €71 million for the reporting period, which represents a very substantial increase of €38 million over the previous year's figure of €333 million.

11 Balance sheet figures, broken down by operating segment				(€ millions)
	RETAIL	CORPORATES	OTHER	HVB GROUP
Loans and receivables with banks (at cost)				
30/6/2022	1	2,052	26,126	28,178
31/12/2021	27	34,438	523	34,988
Loans and receivables with customers (at cost) ¹				
30/6/2022	35,974	91,991	3,675	131,639
31/12/2021	35,398	84,704	3,990	124,092
Deposits from customers				
30/6/2022	64,225	74,782	10,747	149,755
31/12/2021	61,646	60,656	14,215	136,518
Risk-weighted assets compliant with Basel III				
(including equivalents for market risk and operational risk)				
30/6/2022	9,906	66,117	2,196	78,219
31/12/2021	10,264	68,914	3,553	82,731

1 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

12 Net interest		(€ millions)
	1/1-30/6/2022	1/1-30/6/2021
Interest income	1,600	1,523
from financial assets at cost	1,112	1,079
from financial assets at FVTOCI	26	19
from financial assets at FVTPL and hedging derivatives	268	267
from financial assets held for trading	150	107
other interest income	44	51
Negative interest on financial assets	(159)	(176)
Interest expense	(480)	(479)
from financial liabilities at cost	(336)	(306)
of which from lease liabilities	(2)	(3)
from financial liabilities at FVTPL and hedging derivatives	(33)	(32)
from financial liabilities held for trading	(139)	(121)
other interest expense	28	(20)
Negative interest on financial liabilities	330	299
Net interest	1,291	1,167

(f millione)

Net interest in the reporting period also includes interest income of €42 million in connection with the reduction of statutory interest on tax refunds and payments of tax arrears from 6% to 1.8%. This is recognised in interest expense under the other interest expense item as the reversal of a provision set aside. The previous-year period did not include any tax-related, extraordinary items.

The negative interest on financial liabilities contains €115 million relating to the ECB's TLTRO III programme (previous-year period: €108 million). When calculating the effective interest for these liabilities, expected premiums are included that depend on the increase in net lending of eligible loans (loans to the non-financial sector in the eurozone without private construction finance).

Net interest attributable to related parties

The item "Net interest" includes the following amounts attributable to related parties:		(€ millions)
	1/1-30/6/2022	1/1-30/6/2021
Non-consolidated affiliates	(30)	(31)
of which:		
UniCredit S.p.A.	(34)	(38)
sister companies	3	7
subsidiaries	1	—
Joint ventures	—	—
Associates	—	_
Other investees	3	5
Total	(27)	(26)

13 Dividends and other income from equity investments		(€ millions)
	1/1-30/6/2022	1/1-30/6/2021
Dividends and other similar income	22	6
Companies accounted for using the equity method	1	10
Total	23	16

Companies accounted for using the equity method relates exclusively to Comtrade Group B.V., Rotterdam, an associate accounted for using the equity method, which generated a gain on the sale of a division in the previous year. The result is therefore significantly lower than in the previous-year period.

14 Net fees and commissions

		(
	1/1-30/6/2022	1/1-30/6/2021
Fee and commission income	778	736
Securities services for customers	367	363
Payment transactions	157	140
Lending business	87	87
Guarantees	74	63
Distribution of third-party products	56	52
Other commission income	37	31
Fee and commission expense	(171)	(155)
Securities services for customers	(100)	(90)
Payment transactions	(36)	(33)
Lending business	(3)	(3)
Guarantees	(2)	(2)
Distribution of third-party products	_	_
Other commission expense	(30)	(27)
Net fees and commissions	607	581

In the second quarter of the previous year, the German Federal High Court (Bundesgerichtshof – BGH) held that certain clauses contained in general business conditions are invalid. As a result, fee and commission income received due to the application of the clauses now declared invalid may no longer be recognised in profit or loss. The BGH ruling affects business relationships with consumers who did not actively consent to the amendments to the general business conditions affected by the ruling or did so by their implied action. Therefore, fee and commission income totalling a low one-digit million sum was not recognised in the first half of 2021. Provisions were set aside in 2021 in order to reimburse fees for which the basis had retrospectively ceased to apply and these fees were reimbursed to the customers affected if they demanded this. At the reporting date, the provisions set aside in the previous year cover the reimbursements made and those still expected. In the meantime, the customers affected have been contacted in writing and asked to give their consent to the Bank's current general business conditions. For the most part, the customers affected actively consented to these general business conditions by 30 June 2022. In the meantime, fees and commissions are thus charged on the basis of business conditions actively agreed with customers. If, in exceptional cases, a customer has not yet given their consent to the current business conditions, the calculation of the fees has generally been changed to the last valid version of the business conditions agreed with the customer. Consequently, the BGH ruling on the invalidity of certain clauses contained in general business conditions in the second quarter of 2021 has had no further impact of any relevance on fee and commission income in the reporting period.

Notes to the Income Statement (CONTINUED)

Net fees and commissions from related parties

The item "Net fees and commissions" includes the following amounts attributable to related parties: (€ millions) 1/1-30/6/2022 1/1-30/6/2021 Non-consolidated affiliates (13)(9) of which: UniCredit S.p.A. 2 2 (11) sister companies (15)subsidiaries Joint ventures ____ Associates ____ Other investees Total (13)(9)

15 Net trading income

Net trading income totals €340 million in the reporting period (previous-year period: €423 million).

Valuation discounts resulting from the fair value measurement of derivatives, particularly credit value adjustments and funding value adjustments, are recognised under net trading income. The decrease in the valuation discounts when determining fair values had a positive effect and resulted in income of \in 53 million (previous year: \in 157 million).

In addition, losses entailed in the closing of derivatives exposures totalling €94 million to Russian banks, which are due to the sanctions against Russia, weighed on net trading income.

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

		(e minoria)
	1/1-30/6/2022	1/1-30/6/2021
Financial assets mandatorily at FVTPL	(43)	(32)
Financial liabilities designated at FVTPL	(75)	22
Derecognition from other comprehensive income	16	1
Hedge accounting effects	244	44
Fair value equity	(1)	9
Total	141	44

1/1-30/6/2022 1/1-30/6/2021 Fair value hedges 244 44 Changes in fair value of hedged items 3,547 563 Portfolio fair value hedges 4,085 678 Micro fair value hedges (538) (115) Changes in fair value of hedging instruments (519) (3,303) Portfolio fair value hedges (3,821) (633) 114 Micro fair value hedges 518 Cash flow hedges Net gains/(losses) on the cash flows hedges (only ineffective part) Total 244 44

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

Micro fair value hedge for holdings at FVTOCI

Micro fair value hedge for hol				THE HEI Adjustmen Value Inci Carrying Am Hedged Item	RECOGNISED			(€ millions CHANGE IN FAIR VALUE USED TO RECOGNISE AN	
	LESS THAN	MAINING TERN 1 YEAR TO	MORE THAN	IN THE BA	LANCE SHEET	CARRYING	AMOUNT	INEFFECTIVENESS	
	1 YEAR	5 YEARS	5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	FOR THE PERIOD	
Balance as at 30/6/2022									
Nominal									
Hedged items									
EUR	974	1,191	5,228		_	_	_		
USD	624	2,799	86	_		_	_		
Hedging transactions									
EUR	974	1,191	5,213	_	_				
USD	248	2,763	84	_	_				
Interest rate sensitivities in BPV									
Hedged items									
EUR		(1)	(1)			_			
USD	_	(1)	—		_		_		
Hedging transactions									
EUR	—	1	1	_	_	_	_	_	
USD	_	1	_	_	_	_	_	_	
Balance sheet values									
Hedged items	_	_	_	_	388	10,250	_	_	
Hedging transactions	_	_	_	_	_	203	36	_	
Hedge result								(24)	
Hedged items		_	_	_	_	_	_	(502)	
Hedging transactions	_	_	_	—	_	_	—	478	
Balance as at 31/12/2021									
Nominal									
Hedged items									
EUR	1,383	5,946	1,387						
USD	400	2,536	44			—	—		
Hedging transactions									
EUR	1,383	5,935	1,383		_			_	
USD	577	2,141	44			_			
Interest rate sensitivities in BPV									
Hedged items									
EUR		(1)	(1)	_		_			
USD		(1)	_	_		_	_		
Hedging transactions									
EUR		1	1						
USD									
Balance sheet values									
Hedged items			_	59	_	11,941			
Hedging transactions			_	_	_	7	193		
Hedge result								(40)	
Hedged items					_			(207)	
Hedging transactions	_	_	_	_		_	_	167	

Notes to the Income Statement (CONTINUED)

The table shown earlier compares the nominal amounts of the hedged items and the hedging transactions. In addition, the interest rate sensitivities are stated in basis point values (BPV). 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 BPV 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 the interest rate swaps to compensate for premiums and discounts in the purchase price of the securities, which means that their fair value is not equal to zero at the inception of the hedge. Furthermore, the fair value of the derivatives also contains accrued interest (dirty fair value) whereas accrued interest for the hedged items is allocated to these directly and is thus not included in the cumulative amount of the hedge-related adjustments to the carrying amount of the hedged items. Consequently, the net fair value of the hedging derivatives does not reflect the cumulative amount of the hedge-related adjustments to the carrying amount of the hedged items.

Micro fair value hedge for holdings at cost

	holdings at cost are shown below:			THE HEI Adjustmen Value Inc Carrying Am Hedged Item	E AMOUNT OF DGE-RELATED T TO THE FAIR LUDED IN THE IOUNT OF THE RECOGNISED LANCE SHEET	CARRYING	ΔΜΟΙΙΝΤ	CHANGE IN FAIR VALUE USED TO RECOGNISE AN	
	LESS THAN	1 YEAR TO	MORE THAN					INEFFECTIVENESS IN THE HEDGE	
Balance as at 30/6/2022	1 YEAR	5 YEARS	5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	FOR THE PERIOD	
Nominal									
Hedged items									
JPY	2,614		707						
USD		325							
Hedging transactions		020							
JPY	2,625	199	887						
USD		327							
Interest rate sensitivities in BPV		521							
Hedged items									
JPY									
USD									
Hedging transactions									
JPY		_	_			_	_		
USD		_	_			_	_		
Balance sheet values									
Hedged items		_			44	3,756			
Hedging transactions		_							
Hedge result								4	
Hedged items		_						(36)	
Hedging transactions		_	_			_		40	
Balance as at 31/12/2021									
Nominal									
Hedged items									
JPY	77	2,761	767	_	_	_	_	_	
USD		265		_				_	
Hedging transactions									
JPY	5,741	3,066	963						
USD	_	266			_				
Interest rate sensitivities in BPV									
Hedged items									
JPY		_	(1)		_	_			
USD	_	_				_	_		
Hedging transactions									
JPY		_	1	_	_		_		
USD				_	_		_		
Balance sheet values									
Hedged items				(2)		4.041			
Hedging transactions				_			_		
Hedge result									
Hedged items		_	_	_	_	_	_	(7)	
Hedging transactions	_	_	_	_		_		7	

Notes to the Income Statement (CONTINUED)

The nominal amounts of the hedged items and the hedging transactions are compared in the table above. In addition, the interest rate sensitivities are stated in basis point values (BPV). 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 BPV 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

Portfolio fair value hedge								(€ millions)
	A		THE HE ADJUSTMEN VALUE INC CARRYING AN HEDGED ITEM	E AMOUNT OF DGE-RELATED T TO THE FAIR LUDED IN THE IOUNT OF THE I RECOGNISED LANCE SHEET	CARRYING	AMOUNT	CHANGE IN FAIR Value Used To Recognise An Ineffectiveness	
	LESS THAN 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	IN THE HEDGE FOR THE PERIOD
Balance as at 30/6/2022								
Interest rate sensitivities in BPV								
Hedged items								
EUR	_	4	17	_	_	_	_	_
USD	_	1	_	_	_	_		_
CHF		_	_		_	_		
Hedging transactions								
EUR	_	(4)	(17)	_	_	_		_
USD	_			_	_	_		_
CHF			_	_	_	_		_
Balance sheet values								
Hedged items		_	_	173	(3,324)	_	_	
Hedging derivatives		_	_	_		99	236	
Hedge result								264
Hedged items		_	_	_	_	_	_	4,085
Hedging transactions	_	_		_	_	_	_	(3,821)
Balance as at 31/12/2021								
Interest rate sensitivities in BPV								
Hedged items								
EUR		3	17			_		
USD			_			_		
CHF						_		
Hedging transactions								
EUR		(3)	(17)			_		
USD								
CHF								
Balance sheet values								
Hedged items		_	_	24	617	_		
Hedging derivatives	—	_	—	—	—	224	307	
Hedge result								101
Hedged items		_	_	_	_	_	_	1,390
Hedging transactions		_	_	_	_			(1,289)

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 the hedging of fixed interest rate risks, the interest rate risks entailed in the hedged items are managed on a cross-item basis in the portfolio fair value hedge. For this purpose, the interest-relevant cash flows of the hedged items 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. As a hedged item may thus have different effects in the respective maturity bucket, the effects of hedge accounting are presented by reference to interest sensitivity. The statement of interest rate sensitivity by maturity bucket represents an adequate measure for determining the hedged interest rate risks. The table shows the changes in fair value in \in millions if the interest rate changes by one basis point (BPV or 0.01%).

17 Net gains/losses on derecognition of financial instruments measured at cost		(€ millions)
	1/1-30/6/2022	1/1-30/6/2021
Loans and receivables (performing)	—	(3)
Buy-backs of securities issued	4	—
Promissory notes (assets side)	2	2
Total	6	(1)

18 Net other expenses/income

	(e minorio)
1/1-30/6/2022	1/1-30/6/2021
102	116
—	—
31	31
7	24
64	61
(266)	(232)
_	_
(5)	(11)
(3)	(5)
(241)	(193)
(17)	(23)
(164)	(116)
	102

The line item "Valuation/disposals of investment properties" includes either income from valuation gains or disposals or expenses due to valuation losses or disposals. Due to the measurement at fair value through profit or loss of investment properties, such measurement generally has to be adjusted to the anticipated gain on disposal even before derecognition of the asset because a certain amount of time elapses between the receipt of a binding offer for purchase/conclusion of a purchase agreement and the transfer of rights and obligations for the property (derecognition) in which the measurement must be adjusted through profit or loss. Therefore, both items are shown in a single line.

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)
	1/1-30/6/2022	1/1-30/6/2021
Non-consolidated affiliates	36	41
of which:		
UniCredit S.p.A.	5	5
sister companies	31	36
Joint ventures	—	_
Associates	—	_
Other investees	—	_
Total	36	41

(€ millions)

(€ millions)

19 Operating costs

		(E minoris)
	1/1-30/6/2022	1/1-30/6/2021
Payroll costs	(694)	(733)
Wages and salaries	(546)	(576)
Social security costs	(91)	(91)
Expenses for pensions and similar employee benefits	(57)	(66)
Other administrative expenses	(590)	(641)
Amortisation, depreciation and impairment losses	(46)	(58)
on property, plant and equipment	(18)	(32)
on software and other intangible assets, excluding goodwill	(2)	(1)
on right-of-use assets (leases)	(26)	(25)
Total	(1,330)	(1,432)

Operating costs of related parties

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

	1/1-30/6/2022	1/1-30/6/2021
Non-consolidated affiliates	(315)	(322)
of which:		
UniCredit S.p.A.	(10)	(8)
sister companies	(299)	(308)
subsidiaries	(6)	(6)
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	(315)	(322)

20 Net write downs of found and provisions for guarances and communicity		(e minoris)	
	1/1-30/6/2022	1/1-30/6/2021	
Additions	(589)	(404)	
Allowances for losses on loans and receivables at cost	(440)	(274)	
Allowances for losses on loans and receivables at FVTOCI	_	(1)	
Allowances for losses on guarantees and indemnities	(149)	(129)	
Reversals	591	415	
Allowances for losses on loans and receivables at cost	336	254	
Allowances for losses on loans and receivables at FVTOCI	1	_	
Allowances for losses on guarantees and indemnities	254	161	
Gains/(losses) from non-substantial modification	_	1	
Recoveries from write-offs of loans and receivables	21	17	
Gains/(losses) on the disposal of impaired loans and receivables	6	5	
Total	29	34	

In the reporting period, net income from the reversal of net write-downs of loans and provisions for guarantees and commitments totalled \in 29 million after \in 34 million in the previous-year period, representing a significant decline of \in 5 million or 14.7%. The individual effects that offset each other are described below.

In the reporting period, a net amount of \in 31 million was allocated to portfolio allowances following a net reversal of \in 10 million in the previous-year period. In the reporting period, the macroeconomic factors were first adjusted to reflect the deterioration in the economic environment, which led to an allocation to portfolio allowances. In addition, the risks entailed in problems with supply chains, the impact of higher energy costs on companies coupled with the scenario of a halt in gas supplies were taken into account in particular. There was also an allocation to portfolio allowances of \in 43 million for UniCredit group companies based in Russia. The positive development in portfolios due to the initial recovery in economic activities as well as the adjustment made to model parameters had a counteracting effect in the first half of 2022, as the feared negative wave of defaults due to the COVID-19 pandemic has not occurred to date. In the previous-year period, there were net reversals of €10 million in portfolio allowances, although effects from the adjustment of macroeconomic factors and of model parameters offset each other for the most part in the first half of 2021.

In the reporting period, there was a net reversal of \notin 60 million in specific valuation allowances after a net reversal of \notin 24 million in the previous-year period. Allocations to specific valuation allowances on account of defaults were more than compensated for by reversals of existing specific valuation allowances in the first half of 2022. The expected wave of COVID-19-related defaults has not occurred to date. The result (net reversal) was attributable to the reversal of existing specific valuation allowances also in the previous-year period.

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:

	1/1-30/6/2022	1/1-30/6/2021
Non-consolidated affiliates	(43)	_
of which:		
UniCredit S.p.A.	_	—
sister companies	(43)	_
Joint ventures	—	—
Associates	—	—
Other investees	_	_
Total	(43)	_

(€ millions)

Notes to the Income Statement (CONTINUED)

21 Provisions for risks and charges

In the reporting period, net income of $\in 9$ million was generated from the reversal of provisions. This is offset by net expenses of $\in 88$ 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 whereas in the previous-year period an amount of $\in 69$ million related to a provision set aside for penalty payments to the EU Commission, which imposed these in the second quarter for cartel law infringements in connection with EU government bonds.

22 Net gains/losses on disposals of investments

		(e minoris)
	1/1-30/6/2022	1/1-30/6/2021
Shares in affiliates	(3)	(11)
Disposal of companies accounted for using the equity method	—	—
Write-downs	(1)	—
Total	(4)	(11)

(f millione)

In the reporting period and in the previous year, losses on shares in affiliates are primarily due to the deconsolidation of immaterial subsidiaries. In the reporting period, the write-downs are mainly attributable to the associate Comtrade Group B.V., Rotterdam, accounted for using the equity method.

23 Earnings per share

	1/1-30/6/2022	1/1-30/6/2021
Consolidated profit attributable to the shareholder (€ millions)	751	358
Average number of shares	802,383,672	802,383,672
Earnings per share (€) (undiluted and diluted)	0.94	0.45

Notes to the Balance Sheet

24 Cash and cash balances

24 Cash and cash balances		(€ millions)
	30/6/2022	31/12/2021
Cash on hand	6,049	6,006
Balances with central banks	45,651	21,686
Total	51,700	27,692

25 Financial assets held for trading

	30/6/2022	31/12/2021
On-balance sheet financial instruments	28,987	37,863
Fixed-income securities	8,096	9,085
Equity instruments	5,827	7,746
Other financial assets held for trading	15,064	21,032
Positive fair value from derivative financial instruments	55,779	48,051
Total	84,766	85,914
of which subordinated assets	10	9

Financial assets held for trading of related parties

The item "Financial assets held for trading" includes the following amounts attributable to related parties:		(€ millions)
	30/6/2022	31/12/2021
Non-consolidated affiliates	21,071	14,178
of which:		
UniCredit S.p.A.	16,527	11,200
sister companies ¹	4,544	2,978
Joint ventures	_	—
Associates	17	39
Other investees	2	3
Total	21,090	14,220

1 Mostly derivative transactions involving UniCredit Bank Austria AG.

26 Financial assets at FVTPL

26 Financial assets at FVTPL		(€ millions)
	30/6/2022	31/12/2021
Fixed-income securities	4,717	6,376
Equity instruments	379	135
Loans and promissory notes	1,031	932
Other	105	91
Total	6,232	7,534
of which:		
subordinated loans and receivables	15	23
past-due loans and receivables	—	—

27 Financial assets at FVTOCI

Financial assets at FVTOCI total €10,294 million as at the reporting date (previous year: €12,006 million).

Changes in carrying amounts					(€ millions)
	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2022	11,956	50	_	_	12,006
Transfers to another stage due to deterioration in credit quality	(376)	376	_	—	_
Transfers to another stage due to improvement in credit quality	—	—	—	—	—
Changes due to modification not leading to derecognition	—	—	—	—	_
Changes within the stage (net) ¹	(1,703)	(9)	_	—	(1,712)
Derecognition (due to incollectibility)	_	_	_	_	_
Other changes	—	—	_	—	_
Balance as at 30/6/2022	9,877	417	—	—	10,294
Balance as at 1/1/2021	12,421	50	_		12,471
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	(465)	_	_	_	(465)
Derecognition (due to incollectibility)		_	_	_	_
Other changes		_	_	_	_
Balance as at 31/12/2021	11,956	50	_	_	12,006

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

The impairment of securities holdings totals \in 3 million (previous year: \in 4 million). The impairment decreased by \in 1 million whereas it increased by \in 1 million in the previous year.

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)

		(c minorio
	30/6/2022	31/12/2021
Current accounts	3,020	1,881
Cash collateral and pledged credit balances	5,022	5,979
Reverse repos	17,012	10,081
Securities	3,473	2,947
Other loans to banks	2,203	3,732
Non-performing loans and receivables	39	—
Total	30,769	24,620
of which subordinated assets	—	_

(€ millions)

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

Changes in gross carrying amounts

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2022	24,521	104	1		24,626
Addition due to new business	17,617	64		33	17,714
Change in carrying amount within the stage	228	(58)			170
Transfers to another stage due to deterioration in credit quality	(373)	346	27		
from Stage 1 to Stage 2	(346)	346	_	_	
from Stage 2 to Stage 3		_	_	_	
from Stage 1 to Stage 3	(27)	_	27	_	
Transfers to another stage due to improvement in credit quality	140	(140)	_		
from Stage 2 to Stage 1	140	(140)	_	_	
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	(11,747)	(47)	_	_	(11,794)
Disposals due to write-offs/write downs of loans and receivables			_	_	
Foreign currency movements and other changes	75	40	_	_	115
Balance as at 30/6/2022	30,461	309	28	33	30,831
Balance as at 1/1/2021	33,970	5	1	_	33,976
Addition due to new business	13,835	30	_	_	13,865
Change in carrying amount within the stage	(1,266)	(4)	_	_	(1,270)
Transfers to another stage due to deterioration in credit quality	(78)	78	_	_	
from Stage 1 to Stage 2	(78)	78	_	_	
from Stage 2 to Stage 3		_	_	_	
from Stage 1 to Stage 3		_	_	_	
Transfers to another stage due to improvement in credit quality	4	(4)	_	_	
from Stage 2 to Stage 1	4	(4)	_	_	
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	(21,919)	_	_	_	(21,919)
Disposals due to write-offs/write downs of loans and receivables				_	
Foreign currency movements and other changes	(25)	(1)		_	(26)
Balance as at 31/12/2021	24,521	104	1	_	24,626

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2022	4	1	1		6
Addition due to new business	_	_	_	_	
Change in carrying amount within the same stage	_	37	12	9	58
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 recognized in profit or loss				_	
Changes due to modification of assets not leading to derecognition				_	
Disposals (reversal due to disposal of receivable)	(2)			_	(2)
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				_	
Balance as at 30/6/2022	2	38	13	9	62
Balance as at 1/1/2021	2	_	1	_	3
Addition due to new business	3	—	—	—	3
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 recognized in profit or loss	_	_	_	_	
Changes due to modification of assets not leading to derecognition	—	—	—	—	_
Disposals (reversal due to disposal of receivable)	—	—	—	—	
Disposals (utilisation of impairments)	(1)				(1)
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
Balance as at 31/12/2021	4	1	1	_	6

In the first half of the year, HVB updated its parameters for calculating the expected loss. In particular, the adjustment of the rating for Russia and Ukraine to a "CCC" rating had an impact on the portfolio allowances (Stage 1 and 2) for loans and receivables with banks. This resulted in an addition of €35 million to portfolio allowances and the allocation of the respective loans and receivables to Stage 2 for banks belonging to UniCredit that are based in Russia. In addition, a further €8 million in provisions for contingent liabilities were set aside in the first half of 2022 for banks belonging to UniCredit that are based in Russia.

Moreover, derivatives with Russian banks were prematurely terminated in view of the sanctions imposed and the closing receivables remaining from the termination of the derivatives were posted at their fair value. As the banks in question are to be considered as having defaulted at the time when the derivatives were terminated, the receivables have been classified as POCI. The allocation of specific valuation allowances to Stage 3 in the first half of 2022 is likewise to be seen in connection with the default of Russian banks on account of the sanctions imposed.

Loans and receivables with related parties

The item "Loans and receivables with banks (at cost)" includes the following amounts attributable to related parties:		(€ millions)
	30/6/2022	31/12/2021
Non-consolidated affiliates	5,623	5,042
of which:		
UniCredit S.p.A.	5,509	4,314
sister companies ¹	114	728
Joint ventures	—	—
Associates	18	7
Other investees	15	31
Total	5,656	5,080

1 Mainly due from UniCredit Bank Austria AG.

29 Loans and receivables with customers (at cost)		(€ millions
	30/6/2022	31/12/2021
Current accounts	8,502	6,372
Cash collateral and pledged cash balances	4,260	3,337
Reverse repos	921	1,023
Mortgage loans	52,279	50,784
Finance leases	916	1,068
Securities	21,689	21,077
of which asset-backed securities (ABS)	16,046	14,002
Other loans and receivables	62,015	63,108
Non-performing loans and receivables	1,800	1,831
Total	152,382	148,600
of which subordinated assets	1	2

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 €5,204 million (previous year: €4,836 million) funded under the fully consolidated Arabella conduit programme. This mainly involves buying short-term 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 essentially reflect loans and receivables of European borrowers.

Changes in gross carrying amounts					(€ millions
	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2022	125,081	22,249	3,072	4	150,406
Addition due to new business	23,586	2,731	50	1	26,368
Change in carrying amount within the stage	(3,426)	(853)	(24)	_	(4,303)
Transfers to another stage due to deterioration in credit quality	(7,599)	7,304	295	_	_
from Stage 1 to Stage 2	(7,430)	7,430	_	_	_
from Stage 2 to Stage 3	_	(126)	126	_	
from Stage 1 to Stage 3	(169)	_	169	_	
Transfer to another stage due to improvement in credit quality	9,386	(9,313)	(73)	_	
from Stage 2 to Stage 1	9,376	(9,376)	_	_	
from Stage 3 to Stage 2	_	63	(63)		
from Stage 3 to Stage 1	10	_	(10)		
Increase reported directly in equity in gross carrying amounts					
for interest claims not recognised in profit or loss	_	_	43	_	43
Changes due to modification of assets not leading to derecognition	_	(4)	1	_	(3)
Disposals due to repayments/sales	(15,664)	(2,525)	(271)	_	(18,460)
Disposals due to write-offs/write downs of loans and receivables			(134)	_	(134)
Foreign currency movements and other changes	118	52	25	(1)	194
Balance as at 30/6/2022	131,482	19,641	2,984	4	154,111
Balance as at 1/1/2021	119,903	22,903	3,324	27	146,157
Addition due to new business	30,976	3,158	5		34,139
Change in carrying amount within the stage	(449)	(1,994)	(107)	(13)	(2,563)
Transfers to another stage due to deterioration in credit quality	(14,969)	14,448	521	(10)	(2,000)
from Stage 1 to Stage 2	(14,743)	14,743			
from Stage 2 to Stage 3	(11,710)	(295)	295		
from Stage 1 to Stage 3	(226)	(200)	226		_
Transfer to another stage due to improvement in credit quality	13,271	(13,197)	(74)		
from Stage 2 to Stage 1	13,253	(13,253)	(7 1)		
from Stage 3 to Stage 2		56	(56)		
from Stage 3 to Stage 1	18		(18)		
Increase reported directly in equity in gross carrying amounts			(10)		
for interest claims not recognised in profit or loss			74		74
Changes due to modification of assets not leading to derecognition	(1)	3	(3)		(1)
Disposals due to repayments/sales	(23,579)	(3,065)	(679)	(11)	(27,334)
Disposals due to write-offs/write downs of loans and receivables					(,001)
Foreign currency movements and other changes	(71)	(7)	11	1	(66)
Balance as at 31/12/2021	125,081	22,249	3,072	4	150,406

Changes in allowances

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance as at 1/1/2021	232	329	1,245	_	1,806
Addition due to new business	14	7			21
Change in carrying amount within the same stage	(37)	5	55	1	23
Transfers to another stage due to deterioration in credit quality	(55)	105	85		135
from Stage 1 to Stage 2	(54)	112			58
from Stage 2 to Stage 3		(7)	72		65
from Stage 1 to Stage 3	(1)	(•)	13		12
Transfers to another stage due to improvement in credit quality	13	(19)	(8)		(14)
from Stage 2 to Stage 1	12	(26)			(14)
from Stage 3 to Stage 2		7	(7)		()
from Stage 3 to Stage 1	1		(1)		
Increase in impairment reported directly in equity for interest			(1)		
claims not recognised in profit or loss			43		43
Changes due to modification of assets not leading to derecognition					
Disposals (reversal due to disposal of receivables)	(16)	(35)	(103)		(154)
Disposals (utilisation of impairments)	(10)	(00)	(136)		(136)
Reversal of the discounted amount and recognition of			(100)		(100)
interest claims not previously recognised in profit or loss			(19)		(19)
Foreign currency movements and other changes		(1)	24		23
Balance as at 30/6/2022	151	391	1,186	1	1,729
		551	1,100	· ·	1,725
Balance as at 1/1/2021	112	447	1,351		1,910
Addition due to new business	116	52	2		170
Change in carrying amount within the same stage	(19)	30	253		264
Transfers to another stage due to deterioration in credit quality	(28)	87	111		170
from Stage 1 to Stage 2	(27)	96			69
from Stage 2 to Stage 3		(9)	97		88
from Stage 1 to Stage 3	(1)		14		13
Transfers to another stage due to improvement in credit quality	75	(191)	(16)		(132)
from Stage 2 to Stage 1	70	(202)			(132)
from Stage 3 to Stage 2		11	(11)		(102)
from Stage 3 to Stage 1	5		(5)		
Increase in impairment reported directly in equity for interest			(0)		
claims not recognised in profit or loss			74		74
Changes due to modification of assets not leading to derecognition					
Disposals (reversal due to disposal of receivables)	(27)	(96)	(273)		(396)
Disposals (reversal due to disposal of receivables)	<u>(</u>	(50)	(218)		(330)
Reversal of the discounted amount and recognition of			(210)		(210)
			(59)		(50)
interest claims not previously recognised in profit or loss			(58)		(58)
Foreign currency movements and other changes Balance as at 31/12/2021	3 232	329	19 1,245		22 1,806

In the first half of 2022, total portfolio valuation allowances (Stage 1 and Stage 2) for loans and receivables with customers fell by \in 19 million. A decline of \in 81 million in portfolio allowances at Stage 1, which were down from \in 232 million as at 31 December 2021 to \in 151 million as at 30 June 2022, is offset by an allocation of \in 62 million to portfolio allowances at Stage 2, which were up from \in 329 million as at 31 December 2021 to \in 391 million as at 30 June 2022.

Firstly, the positive development in portfolios due to the initial recovery in economic activities as well as the adjustments made to specific model parameters had an impact in the first half of 2022, as the feared negative wave of defaults due to the COVID-19 pandemic has not occurred to date.

The adjustment of the assumptions made regarding future economic conditions, in particular regarding the expected weaker growth rates for the gross domestic product in 2022 compared with 2021, had the opposite effect due to the deterioration in the economic environment that occurred over the first half of the year. HVB now expects the growth rates for major economies to be significantly lower this year than assumed as at year-end 2021. Consequently, the growth rates for the annual real gross domestic product in the baseline scenario for Germany have, for example, been reduced to 1.9% for 2022, 2.8% for 2023 and 2.0% for 2024 (assumptions as at 31 December 2021: 5.0% for 2022, 2.2% for 2023 and 1.7% for 2024).

In view of the continuing uncertainty, the weighting of the macroeconomic scenarios used was adjusted. The weighting of the baseline scenario was increased by 5 percentage points from 55% to 60% to the detriment of the positive scenario. The probability of occurrence of the positive scenario is now at 0%. The probability of occurrence of the negative scenario was maintained at 40%. The negative scenario assumes an escalation of the conflict with restricted gas supplies and higher energy prices compared with the baseline scenario, which will lead to a recession for most Western European countries in 2023. Governments will adhere to their expansionary policies to mitigate the spill-over effects of the conflict in Ukraine (e.g. trade disruptions, material shortages and high energy and commodity prices).

While the updated assumptions on growth rates implicitly reflect macroeconomic risks on a wider scale, additional management adjustments were posted in the first half of 2022 in order to depict more specific risks in connection with the ongoing conflict, which are not yet captured by the models for calculating the expected loss.

For instance, a management adjustment was posted in order to reflect the increase in energy costs and bottlenecks in supply chains. These adjustments were applied to specific branches that are expected to be more strongly affected by the higher costs.

Another management adjustment maps the scenario of a potential halt in gas supplies in Germany. For this purpose, the stage transfer was reduced to a conservative parameter in order to take account of the greater risk of gas supplies being cut and to reflect the transfers to Stage 2 caused as a result.

In the previous-year period, there were net reversals of €25 million in portfolio allowances for loans and receivables with customers, with effects from the adjustment of the macroeconomic factors and of model parameters offsetting each other for the most part in the first half of 2021.

Furthermore, there was a net reversal of \notin 59 million in specific valuation allowances in the reporting period after a net reversal of \notin 74 million in the previous-year period. Allocations to specific valuation allowances on account of defaults were more than compensated for by reversals of existing specific valuation allowances in the first half of 2022. The expected wave of COVID-19-related defaults has not occurred to date. The result (net reversal) was attributable to the reversal of existing specific valuation allowances also in the previous-year period.

Loans and receivables with related parties

he item "Loans and receivables with customers (at cost)" includes the following amounts attributable to related parties:		
	30/6/2022	31/12/2021
Non-consolidated affiliates	58	41
of which:		
sister companies	50	33
subsidiaries	8	8
Joint ventures	_	_
Associates	_	45
Other investees	331	328
Total	389	414

30 Hedging derivatives

	30/6/2022	31/12/2021
Micro fair value hedge	202	7
Portfolio fair value hedge1	100	224
Total	302	231

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)
	30/6/2022	31/12/2021
Associated companies accounted for using the equity method	12	12
of which goodwill	_	_
Joint ventures accounted for using the equity method	_	_
Total	12	12

32 Property, plant and equipment

	30/6/2022	31/12/2021
Land	1,165	1,148
Buildings	916	905
Plant and office equipment	169	214
Right-of-use assets (leases)	171	183
of which land and buildings	163	175
Total	2,421	2,450

(€ millions)

Changes in property, plant and equipment

	LAND	BUILDINGS	PLANT And office Equipment	RIGHT-OF-USE ASSETS (LEASES)	TOTAL INTER- NALLY USED PROPERTY, PLANT AND EQUIPMENT	OTHER PROPERTY, PLANT AND EQUIPMENT	TOTAL PROPERTY, Plant and Equipment
Acquisition costs as at 1/1/2022	1,148	2,528	743	348	4,767	_	4,767
Write-downs and write-ups from previous years	_	(1,623)	(529)	(165)	(2,317)		(2,317)
Carrying amounts as at 1/1/2022	1,148	905	214	183	2,450	_	2,450
Additions							
Acquisition/production costs	_	7	5	11	23	_	23
Adjustment due to revaluation in reporting							
period (OCI)	19	19	_		38		38
Write-ups		17	_		17		17
Changes from currency translation				2	2		2
Other additions ¹			_	3	3		3
Disposals				0	0		
Sales		(1)	(35)	(1)	(37)		(37)
Adjustment due to revaluation in reporting		(1)	(00)	(1)	(01)		(01)
period (OCI)	(2)	(7)	_		(9)		(9)
Depreciation and write-downs	(=)	(15)	(15)	(26)	(56)		(56)
Impairments		(7)	(10)	(1)	(8)		(8)
Changes from currency translation		(* /	_		(0)		(0)
Non-current assets or disposal groups held for sale		(2)			(2)		(2)
Other disposals ¹		(L)			(2)		(4)
Carrying amounts as at 30/6/2022	1,165	916	169	171	2,421		2,421
Write-downs and write-ups from previous years	1,105	510	105		2,721		2,721
plus the reporting period		1,618	563	186	2,367		2,367
Acquisition costs as at 30/6/2021	1,165	2,534	732	357	4,788		4,788
Acquisition costs as at 30/0/2021	1,105	2,004	132		4,700		4,700
Acquisition costs as at 1/1/2021	1,045	2,554	765	358	4,722	_	4,722
Write-downs and write-ups from previous years	_	(1,607)	(502)	(88)	(2,197)		(2,197)
Carrying amounts as at 1/1/2021	1,045	947	263	270	2,525	_	2,525
Additions							
Acquisition/production costs		59	12	16	87		87
Adjustment due to revaluation in reporting							
period (OCI)	145	37	_		182		182
Write-ups		9	_	5	14		14
Changes from currency translation				3	3		3
Other additions ¹		1	7	2	10		10
Disposals							
Sales	(1)	(22)	(10)	(21)	(54)		(54)
Adjustment due to revaluation in reporting	(1)	(LL)	(10)	(= 1)	(01)		(01)
period (OCI)	(40)	(47)	_		(87)		(87)
Depreciation and write-downs		(31)	(38)	(51)	(120)		(120)
Impairments		(43)	(13)	(39)	(95)		(95)
Changes from currency translation		(10)	()	(00)			(30)
Non-current assets or disposal groups held for sale			_				
Other disposals ¹	(1)	(5)	(7)	(2)	(15)		(15)
Carrying amounts as at 31/12/2021	1,148			183	2,450		2,450
	1,140	303	214	103	2,400		2,430
Write-downs and write-ups from previous years plus the reporting period		1,623	529	165	2,317		2,317

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 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 \in 68 million as at the reporting date (previous year: \in 72 million).

Changes in investment properties

	2022	2021
Carrying amounts as at 1/1	360	352
Additions		
Acquisitions	—	1
Valuation gains	7	42
Subsequent expenses	—	_
Changes from currency translation	—	—
Other additions ¹	_	_
Disposals		
Sales	—	(1)
Valuation losses	(5)	(16)
Changes from currency translation	_	_
Non-current assets or disposal groups held for sale	(28)	(8)
Other disposals ¹		(10)
Carrying amounts as at 30/6 / 31/12	334	360

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

34 Intangible assets		(€ millions)
	30/6/2022	31/12/2021
Internally generated intangible assets	6	6
Other intangible assets	1	2
Total	7	8

HVB no longer generates any software internally. Software is provided to HVB by the UniCredit-wide service provider UniCredit Services S.C.p.A.

35 Non-current assets or disposal groups held for sale		(€ millions)
	30/6/2022	31/12/2021
Cash and cash balances		_
Financial assets at FVTPL	216	207
Financial assets at FVTOCI		
Loans and receivables with banks (at cost)	3	2
Loans and receivables with customers (at cost)	145	137
Investments in associates and joint ventures accounted for using the equity method	_	_
Property, plant and equipment	4	1
Investment properties	49	31
Intangible assets	5	5
Tax assets	5	7
Inventories (IAS 2)	183	183
Other assets	40	122
Total	650	695

As at 30 June 2022, non-current assets or disposal groups held for sale include the following selling activities:

- Planned sale of the subsidiary Wealth Management Capital Holding GmbH, Munich, which was already classified as non-current assets or disposal groups held for sale as at 31 December 2020. The sale is expected to be completed in the first half of 2023.
- Sale of three non-strategic properties.

The planned sale of the subsidiary Wealth Management Capital Holding GmbH, Munich, mainly relates to the following assets: Minority interests in placed real asset funds are recognised under financial assets at FVTPL. The increase in financial assets at FVTPL is based on changes in measurement totalling \in 6 million and additions of new units of \in 3 million. Real estate that was purchased in order to either contribute it to funds and place the fund units with investors or to resell it directly to institutional investors is reported under inventories. The decline of \in 82 million in other assets in the first half of 2022 is primarily attributable to the disposal of an other receivable. Consequently, this decline is based on the normal course of business of the subsidiary Wealth Management Capital Holding GmbH, which HVB is aiming to sell.

In the second quarter of 2022, HVB decided to end the sales process involving UniCredit Leasing GmbH with its subsidiaries. Please refer to the Accounting and Valuation – UniCredit Leasing GmbH section for further information on the ending of the sales process.

In the previous year, one non-strategic property (investment property, allocated to Level 2) of \in 8 million was also reported as non-current assets or disposal groups held for sale, which was sold in January 2022. In the first half of 2022, two investment properties (allocated to Level 2) with a carrying amount of \in 29 million were classified as non-current assets or disposal groups held for sale, which will be sold in the second half of 2022. Furthermore, a property owned and occupied by the Bank with a carrying amount of \in 3 million was classified as non-current assets or disposal groups held for sale, which will be sold in the second half of 2022.

No impairments were required to be recognised for non-current assets or disposal groups held for sale in the first half of 2022 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. As real estate represents a unique item, 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 real estate may be sold at this price on the basis of binding or reliable non-binding offers.

Level 3 fundamentally relates to assets or liabilities whose fair value is not calculated exclusively on the basis of observable market data (nonobservable input data). External valuation reports are based on generally recognised valuation procedures that refer to 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 ON VAL	UATION PARAMETERS	FAIR VALUE BASED ON VAL	LIATION PARAMETERS
	OBSERVED ON T (LEVEL	THE MARKET	NOT OBSERVED ON (LEVEL	THE MARKET
	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Investment properties, classified as non-current assets or				
disposal groups held for sale	29	8	20	23

Changes in investment properties allocated to Level 3:

	2022	2021
Carrying amount as at 1/1	23	23
Additions to the portfolio (classified as Level 3)	—	_
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)	(3)	_
Disposals due to reclassification from Level 3 to Level 2	_	_
Carrying amount as at 30/6 / 31/12	20	23

There were no reclassifications from Level 2 to Level 3.

The financial assets at FVTPL shown here are allocated to Level 3 as the fair values are based on individual valuation reports. There were no reclassifications to other levels in the reporting year or in the previous year.

(£ millione)

36 Other assets

Other assets include prepaid expenses of €123 million (previous year: €135 million).

37 Deposits from banks

Deposits from central banks Deposits from banks Current accounts Cash collateral and pledged credit balances Repos Term deposits	30/6/2022	31/12/2021
Deposits from banks Current accounts Cash collateral and pledged credit balances Repos	04.404	
Current accounts Cash collateral and pledged credit balances Repos	34,494	32,052
Cash collateral and pledged credit balances Repos	36,060	29,655
Repos	3,205	1,789
	10,439	7,883
Term deposits	4,067	4,190
	2,127	889
Other liabilities	16,222	14,904
Total	70,554	61,707

(€ millions)

Deposits from central banks include liabilities from the participation in the TLTRO III programme totalling \in 31 billion as at the reporting date (previous year: \in 32 billion).

Amounts owed to related parties

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

	30/6/2022	31/12/2021
Non-consolidated affiliates	2,687	3,124
of which:		
UniCredit S.p.A.	1,708	1,928
sister companies ¹	979	1,196
Joint ventures	—	—
Associates	113	130
Other investees	26	18
Total	2,826	3,272

1 Largest single items relate to UniCredit Bank Austria AG.

38 Deposits from customers

38 Deposits from customers		(€ millions)
	30/6/2022	31/12/2021
Current accounts	110,948	95,677
Cash collateral and pledged credit balances	3,957	6,067
Savings deposits	15,200	14,986
Repos	1,172	1,928
Term deposits	16,593	13,054
Promissory notes	1,003	1,059
Lease liabilities	382	410
Other liabilities	882	1,159
Total	150,137	134,340

Amounts owed to related parties

The item "Deposits from customers" includes the following amounts attributable to related parties:		(€ millions)
	30/6/2022	31/12/2021
Non-consolidated affiliates	140	263
of which:		
sister companies	120	245
subsidiaries	20	18
Joint ventures	—	—
Associates	—	—
Other investees	349	274
Total	489	537

39 Debt securities in issue

39 Debt securities in issue		(€ millions)
	30/6/2022	31/12/2021
Bonds	31,470	32,180
of which:		
registered Mortgage Pfandbriefe	3,665	3,737
registered Public Pfandbriefe	1,334	1,634
Mortgage Pfandbriefe	16,334	15,899
Public Pfandbriefe	1,740	697
registered bonds	2,173	2,308
Other securities		—
Total	31,470	32,180

Debt securities in issue, payable to related parties

The item "Debt securities in issue" includes the following amounts attributable to related parties:		(€ millions)
	30/6/2022	31/12/2021
Non-consolidated affiliates	3,301	3,315
of which:		
UniCredit S.p.A.	3,301	3,315
sister companies	—	—
Joint ventures	—	—
Associates	—	—
Other investees	2	2
Total	3,303	3,317

40 Financial liabilities held for trading

		(************
	30/6/2022	31/12/2021
Negative fair values arising from derivative financial instruments	54,852	44,053
Other financial liabilities held for trading	8,894	9,606
Total	63,746	53,659

(€ millions)

(€ millions)

The negative fair values from derivative financial instruments are carried as financial liabilities held for trading. In addition, warrants, certificates and bonds issued by our trading department 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 €4,896 million (previous year: €5,510 million) primarily contains own structured issues.

42 Hedging derivatives

		(=
	30/6/2022	31/12/2021
Micro fair value hedge	36	193
Portfolio fair value hedge1	236	307
Total	272	500

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 minus €3,324 million net (previous year: €617 million). The fair value of the netted portfolio fair value hedge derivatives represents a net comparable amount resulting from a countermovement. On account of the higher interest rates in the first half of 2022, the amount reported for the hedge adjustment has increased sharply and is shown as a negative figure. Based on the rules of IAS 39.89A in conjunction with IAS 39.AG123, the nature of the hedged item determines the 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

30/6/2022	31/12/2021
106	118
309	301
9	8
123	131
6	7
553	565
	106 309 9 123 6

As at 30 June 2022 and in the previous year, the liabilities of disposal groups held for sale relate exclusively to the liabilities of Wealth Management Capital Holding GmbH, Munich and its consolidated subsidiaries.

45 Provisions

45 Provisions		(€ millions)
	30/6/2022	31/12/2021
Provisions for pensions and similar obligations	97	759
Allowances for losses on guarantees and commitments and irrevocable credit commitments	349	454
Restructuring provisions	624	690
Other provisions	767	848
Payroll provisions	276	298
Provisions related to tax disputes (without income taxes)	119	160
Provisions for rental guarantees and dismantling obligations	99	99
Provisions for legal risks and similar risks	108	178
Other provisions	165	113
Total	1,837	2,751

Provisions for pensions and similar obligations

As at 30 June 2022, 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 asset from defined benefit plans totalling €131 million was calculated for HVB Group, resulting from netting the present value of the aggregate (funded and unfunded) defined benefit obligations (DBO) of €4,195 million with the fair value of the plan assets of €4,326 million.

This amount was recognised in the consolidated balance sheet of HVB Group as at 30. June 2022 as follows:

- The surplus from pension plans with an excess of assets over liabilities was recognised at an amount of €228 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 asset value 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 €97 million in the consolidated balance sheet as recognised pension provisions under provisions for pensions and similar obligations.

The key reason for the relatively sharp decrease in pension provisions (down \in 662 million/minus 87.2%) or the incurrence of other assets (up \in 228 million/+100%) over year-end 2021 was the increase by 220 basis points to 3.45% in the discount rate (weighted average) (31 December 2021: 1.25%) due to the capital market performance in the first half of 2022. A higher discount rate results in stronger discounting of the liabilities under defined benefit obligations and thus to a decrease in the present value of liabilities. By contrast, the counteracting effect due to the decline in market values of the plan assets in the first half of 2022 was less significant.

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 positive total effect from remeasurements of €915 million, which was recognised directly in shareholders' equity without affecting profit or loss and in other comprehensive income (OCI) within 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":

	30/6/2022	31/12/2021
Subordinated liabilities	1,095	1,108
Hybrid capital instruments	1,700	1,700
Total	2,795	2,808

Other Information

47 Events after the reporting period

There were no significant events at HVB Group after 30 June 2022 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. We have assigned mostly listed equity instruments, bonds and exchange-traded derivatives to this category.

Assets and liabilities whose valuation is derived from directly observable (prices) or indirectly observable (derived from prices) input data (valuation parameters) are shown in Level 2. 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 \in 1,501 million (previous year: 418 million) were transferred between Level 1 and Level 2. At the same time, financial assets or liabilities of \in 389 million (previous year: \in 2,846 million) were transferred between Level 2 and 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.

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

			(*************************
		TO LEVEL 1	TO LEVEL 2
Financial assets held for trading			
	Transfer from Level 1	—	36
	Transfer from Level 2	29	_
Financial assets at FVTPL			
	Transfer from Level 1	—	1,142
	Transfer from Level 2	154	_
Financial assets at FVTOCI			
	Transfer from Level 1	_	321
	Transfer from Level 2	206	_
Financial liabilities held for trading			
	Transfer from Level 1	_	2
	Transfer from Level 2	_	_
Financial liabilities at FVTPL			
	Transfer from Level 1	—	—
	Transfer from Level 2	—	_

Other Information (Continued)

1 January is considered the transfer date for instruments transferred between the levels in the reporting period (1 January to 30 June).

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 reference and ABS bonds of an asset class for which no liquid market exists.

If 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, which are calibrated according to the principle of prudent evaluation, are determined for these non-observable parameters and applied for valuation purposes, upon valuation as at 31 December 2021. In addition, individual parameters that cannot be incorporated separately 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-91bps
Equities	Market approach	Price	0%-3%
Asset-backed securities (ABS)	DCF method	Credit spread curves	22bps-1,603bps
		Residual value	0%-50%
		Default rate	0%-0%
		Prepayment rate	0%-6%
Commodity/equity derivatives	Option price model	Commodity price volatility/equity volatility	1%-13%
		Correlation between commodity/equities	2%-25%
	DCF method	Dividend yields	1%-26%
Interest rate derivatives	DCF method	Swap interest rate	0bps-186bps
		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-91bps
		Residual value	0%-5%
Currency derivatives	DCF method	Yield curves	Obps-186bps
	Option price model	FX volatility	0%-162%

The sensitivity analysis presented below shows the impact of changing reasonable possible alternative parameter values on the fair value of the financial instruments classified as Level 3. The level of variation of the non-observable parameters reflects the prevailing market conditions regarding the valuation of sensitivities. For portfolios at fair value through profit or loss, the positive and negative fair value changes would amount to a plus or minus of \in 67 million respectively as at the reporting date (previous year: a plus or minus of \notin 46 million respectively).

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

for the various product types:				(€ millions)
	30/6/2022		31/12/2021	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
Fixed-income securities and other debt instruments	6	(6)	_	_
Equities	_	_	_	_
Asset-backed securities	_	_	_	_
Commodity/equity derivatives	55	(55)	42	(42)
Interest rate derivatives	6	(6)	4	(4)
Credit derivatives	_	_	_	_
Currency derivatives	_	_	_	_
Total	67	(67)	46	(46)

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 in line with the ratings. 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 the 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 as part of 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 non-observable 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 main input parameters are based on observable market data, the deferred trade date gain is taken directly to the income statement in net trading income.

Other Information (CONTINUED)

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:

or the application of significant non-observable parameters for inflancial instruments recognised at rail value.	
2022	2021
21	18
5	26
(2)	1
_	_
2	22
—	—
26	21
	21 5 (2) 2

(f milliono)

(€ millions)

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 OBSERVED ON AN ACTIVE MARKET (LEVEL 1)		FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2)		FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3)	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Financial assets recognised						
in the balance sheet at fair value						
Financial assets held for trading	19,730	28,146	62,874	56,536	2,162	1,232
of which derivatives	3,918	4,894	50,019	42,376	1,842	781
Financial assets at FVTPL	2,660	4,925	2,730	2,140	842	469
Financial assets at FVTOCI	9,886	11,659	408	347		—
Hedging derivatives	_		301	231	1	—
Financial liabilities recognised in the						
balance sheet at fair value						
Financial liabilities held for trading	7,296	9,472	54,483	43,026	1,967	1,161
of which derivatives	4,977	5,958	48,514	37,472	1,361	623
Financial liabilities at FVTPL	_	_	4,498	5,115	398	395
Hedging derivatives	_		272	500	_	_

The following table shows the changes in the financial assets allocated to Level 3 in the fair value hierarchy:					
	FINANCIAL ASSETS HELD FOR TRADING	FINANCIAL ASSETS AT FVTPL	FINANCIAL ASSETS AT FVTOCI	HEDGING DERIVATIVES	
Balance as at 1/1/2022	1,232	469	—	—	
Additions					
Purchases	807	210	—	1	
Realised gains ¹	276	44	_	_	
Transfer from other levels	378	208	—	_	
Other additions ²	24	—	—	_	
Disposals					
Sales	(304)	(60)	_		
Repayment	_	(8)	_		
Realised losses ¹	(91)	(20)	_		
Transfer to other levels	(157)	_	_		
Other disposals	(3)	(1)	_	_	
Balance as at 30/6/2022	2,162	842		1	
Balance as at 1/1/2021	1,320	321			
Additions					
Purchases	578	97	_	_	
Realised gains ¹	61	53	_		
Transfer from other levels	67	80	_		
Other additions ²	10	15	_		
Disposals					
Sales	(513)	(46)	_		
Repayment	(92)	(2)	_		
Realised losses ¹	(87)	(45)	_		
Transfer to other levels	(80)	(3)	_		
Other disposals	(32)	(1)	_	_	
Balance as at 31/12/2021	1,232	469	_		

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

(€ millions)

1 In the income statement and shareholders' equity. 2 Also including changes in the group of companies included in consolidation.

The increase in Level 3 financial assets held for trading is mainly due to a revision of the determination of fair value levels and a change in the significance of non-observable parameters. This resulted in a net addition from both purchases/sales and level transfers. The additions from purchases in financial assets at FVTPL are primarily attributable to the extension of syndicated loans.

Other Information (CONTINUED)

	FINANCIAL LIABILITIES HELD FOR TRADING	FINANCIAL LIABILITIES AT FVTPL	HEDGING DERIVATIVES
Balance as at 1/1	1,161	395	
Reclassification of financial liabilities held for trading to financial liabilities at FVTPL			
Balance as at 1/1 (after reclassification)	1,161	395	
Additions			
Sales	312	_	
Issues	274	81	
Realised losses ¹	183	3	
Transfer from other levels	701	98	
Other addition ^{s2}	17	2	
Disposals			
Buy-backs	(225)	(25)	
Repayment	_		
Realised gains ¹	(230)	(44)	
Transfer to other levels	(218)	(111)	
Other disposals	(8)	(1)	
Balance as at 30/6/2022	1,967	398	
Balance as at 1/1	903	361	
Reclassification of financial liabilities held for trading to financial liabilities at FVTPL			
Balance as at 1/1 (after reclassification)	903	361	
Additions			
Sales	146		
Issues	336	179	
Realised losses ¹	103	34	
Transfer from other levels	153	58	
Other additions ²	95	8	_
Disposals			
Buy-backs	(240)	(23)	
Repayment	(31)	(47)	
Realised gains ¹	(124)	(39)	
Transfer to other levels	(153)	(128)	_
Other disposals	(27)	(8)	
Balance as at 31/12/2021	1,161	395	

1 In the income statement and shareholders' equity.

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

Most of the additions as well as the net transfers from other levels are largely due to adjustments to fair value levels resulting from the regular review of the determination of fair value levels. In addition, adjustments were made on account of the materiality of individual non-observable parameters. These resulted in transfers to other levels in the opposite direction in the event of immateriality.

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. (€ billions)

	CARRYING	CARRYING AMOUNT		
	30/6/2022	31/12/2021	30/6/2022	31/12/2021
ASSETS	51.7	27.7	51.7	27.7
Cash and cash balances	84.8	85.9	84.8	85.9
Financial assets held for trading	6.2	7.5	6.2	7.5
Financial assets at FVTPL	10.3	12.0	10.3	12.0
Financial assets at FVTOCI	30.8	24.6	30.6	24.8
Loans and receivables with banks (at cost)	152.4	148.6	152.4	154.4
of which finance leases	0.9	1.0	0.9	1.0
Hedging derivatives	0.3	0.2	0.3	0.2
Total	336.5	306.5	336.3	312.5
LIABILITIES				
Deposits from banks	70.6	61.7	69.2	61.8
Deposits from customers	150.1	134.3	150.0	134.3
Debt securities in issue	31.5	32.2	30.2	34.5
Financial liabilities held for trading	63.7	53.7	63.7	53.7
Financial liabilities at FVTPL	4.9	5.5	4.9	5.5
Hedging derivatives	0.3	0.5	0.3	0.5
Total	321.1	287.9	318.3	290.3

Other Information (CONTINUED)

						(€ billions)
	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1)		ON VALUATIO	R VALUE BASED N PARAMETERS DN THE MARKET (LEVEL 2)	FAIR VALUE BAS ON VALUATION PARAMETERS N OBSERVED ON THE MARI (LEVEI	
	30/6/2022	31/12/2021	30/6/2022	31/12/2021	30/6/2022	31/12/2021
Financial assets not carried at						
fair value in the balance sheet						
Cash and cash balances	_	_	51.7	27.7	—	—
Loans and receivables with banks (at cost)	1.9	1.7	25.5	22.5	3.2	0.6
Loans and receivables with customers (at cost)	10.7	11.1	63.6	69.5	78.1	73.8
of which finance leases		_			0.9	1.0
Financial liabilities not carried at						
fair value in the balance sheet						
Deposits from banks	—	—	63.5	53.9	5.7	7.9
Deposits from customers	_	_	147.3	130.4	2.7	3.9
Debt securities in issue	14.8	14.8	6.3	7.0	9.1	12.7

At HVB Group, the difference between the fair values and carrying amounts totals minus $\in 0.2$ billion for assets (previous year: $\in 6.0$ billion) and minus $\in 2.8$ billion for liabilities (previous year: $\in 2.4$ billion). The net balance of these amounts is $\in 2.6$ billion (previous year: $\in 3.6$ billion). When comparing carrying amounts and fair values of the hedged items, it should be noted that part of the undisclosed reserves/charges 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: (€ millions)

				AMO	UNTS NOT RECOGNIS	SED	
	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 COLLATERAL	NET AMOUNT
Derivatives ¹	220,421	(164,340)	56,081	(36,893)	(336)	(8,918)	9,934
Reverse repos ²	25,807	(5,904)	19,903	—	(19,313)	—	590
Loans and receivables ³	89,854	(4,832)	85,022	—	—	_	85,022
Total as at 30/6/2022	336,082	(175,076)	161,006	(36,893)	(19,649)	(8,918)	95,546
Derivatives ¹	87,196	(38,914)	48,282	(26,910)	(111)	(9,634)	11,627
Reverse repos ²	17,903	(1,602)	16,301	—	(15,672)	—	629
Loans and receivables ³	89,791	(6,122)	83,669	—	_	_	83,669
Total as at 31/12/2021	194,890	(46,638)	148,252	(26,910)	(15,783)	(9,634)	95,925

1 Derivatives are included in the balance sheet items "Financial assets 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 €1,970 million (previous year: €5,197 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)".

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

				AMO	UNTS NOT RECOGNI	SED	
	FINANCIAL LIABILITIES (GROSS)	FINANCIAL ASSETS NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED LIABILITIES (NET)	EFFECTS OF MASTER NETTING ARRANGEMENTS	FINANCIAL INSTRUMENTS AS COLLATERAL	CASH COLLATERAL	NET AMOUNT
Derivatives ¹	222,329	(167,205)	55,124	(36,893)	(491)	(8,116)	9,624
Reverse repos ²	12,961	(5,904)	7,057	—	(6,792)	_	265
Liabilities ³	147,620	(1,967)	145,653	_	_	_	145,653
Total as at 30/6/2022	382,910	(175,076)	207,834	(36,893)	(7,283)	(8,116)	155,542
Derivatives ¹	88,414	(43,861)	44,553	(26,911)	(544)	(8,215)	8,883
Reverse repos ²	9,957	(1,602)	8,355	—	(8,188)	—	167
Liabilities ³	128,198	(1,176)	127,022	_	_	_	127,022
Total as at 31/12/2021	226,569	(46,639)	179,930	(26,911)	(8,732)	(8,215)	136,072

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

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 €1,568 million (previous year: €2,236 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".

Other Information (Continued)

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 off-set 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 (€ millions)				
	30/6/2	2022	31/12/2	2021
	CARRYING	OF WHICH TRANSFERRED AS COLLATERAL	CARRYING AMOUNT	OF WHICH TRANSFERRED AS COLLATERAL
Financial assets held for trading	84,766	3,291	85,914	1,772
Financial assets at FVTPL	6,232	80	7,534	162
Financial assets at FVTOCI	10,294	407	12,006	883
Loans and receivables with banks (at cost)	30,769	84	24,620	_
Loans and receivables with customers (at cost)	152,382	159	148,600	196
Total	284,443	4,021	278,674	3,013

52 Contingent liabilities and other commitments

	30/6/2022	30/12/2021
Contingent liabilities ¹	30,347	28,110
Financial guarantees (guarantees and indemnities)	30,347	28,110
Other commitments	60,353	57,963
Irrevocable credit commitments	60,347	57,957
Other commitments	6	6
Total	90,700	86,073

(€ millions)

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

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 (Restrukturierungsfonds-gesetz – RStruktFG). The cash collateral provided for this purpose amounted to €104 million at the reporting date. 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). The cash collateral provided for this purpose amounts to €22 million at the reporting date. No new irrevocable payment commitments were issued in the reporting period.

HVB has 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). The financial security provided in this regard amounted to €39 million as at the reporting date (previous year: €39 million). No new irrevocable credit commitments were given in the reporting period.

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 to fix and manipulate the prices of states District 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 UC Capital Markets LLC motion to dismiss while denying HVB's motion to dismiss. The court has since denied HVB's motion for reconsideration, and HVB has answered the operative complaint.

Claim in relation to interest rate swap

In December 2021 HVB was named as defendant in a case pertaining to an interest rate swap commenced by an Italian region before the Court of Bologna in Italy. The region argues, inter alia, HVB's precontractual and/or non-contractual liability because HVB had allegedly missed to include certain requirements in the swap allegedly needed for the validity of the contract. The region seeks damages for an amount of approx. \in 52 million (equal to the payments made under the swap), as well as a declaration that no further sums are due to HVB (equal to approx. \in 18 million). The first hearing of the case is scheduled for 21 July 2022.

Contingent liabilities payable to related parties		(€ millions)
	30/6/2022	31/12/2021
Non-consolidated affiliates	1,712	2,106
of which:		
UniCredit S.p.A.	1,019	1,227
sister companies	687	873
subsidiaries	6	6
Joint ventures	—	—
Associates	—	—
Other investees	74	75
Total	1,786	2,181

Other Information (Continued)

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 group of companies. The quantitative information in this regard can be found in the notes to the income statement and the notes to the balance sheet.

HVB has been assigned the role of centre of competence for the markets and investment banking activities of the entire UniCredit corporate group. Among other things, HVB acts as counterparty for derivative transactions conducted by UniCredit companies in this role. For the most part, this involves hedge derivatives that are externalised on the market via HVB. Information regarding the exposure to UniCredit and its subsidiaries is described in Management's Discussion and Analysis \rightarrow Risk Report \rightarrow "Risk types in detail" \rightarrow "Credit risk".

Like other affiliates, HVB has outsourced IT activities to UniCredit Services S.C.p.A., Milan, a company that is affiliated with the Bank. The goal is to exploit synergies and enable the Bank to offer fast, high-quality IT services by means of a service level agreement. HVB incurred expenses of \in 252 million for these services in the reporting year (previous-year period: \in 251 million). This was offset by income of \in 12 million (previous-year period: \in 12 million) from services rendered and internal charges. Moreover, software products worth \in - million (previous-year period: \in 1 million) were purchased from UniCredit Services S.C.p.A.

Furthermore, HVB Group has transferred certain back office activities to UniCredit Services S.C.p.A. In this context, UniCredit Services S.C.p.A. provides settlement services for HVB and other affiliates in line with a standard business and operating model. HVB Group incurred expenses of €53 million for these services in the reporting year (previous-year period: €51 million).

Transactions involving related parties are generally conducted on an arm's length basis.

			(c thousands)			
		30/6/2022			31/12/2021	
	LOANS AND RECEIVABLES	Contingent Liabilities Assumed	LIABILITIES	LOANS AND Receivables	Contingent Liabilities Assumed	LIABILITIES
Members of the Management Board of UniCredit Bank AG	3,326	1,527	3,116	3,264	131	2,226
Members of the Supervisory Board of UniCredit Bank AG	_	_	504	_	_	475
Members of the Group Executive Committee ¹	_	_	_	_	_	_

Loans and advances made to, and contingent liabilities and liabilities assumed for, related parties at the reporting date were as follows: (6 thousands)

1 Excluding members of the Management Board and Supervisory Board of UniCredit Bank AG.

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

Mortgage loans were granted to members of the Management Board and their immediate family members with interest rates of between 0.35% and 2.03% falling due in the period from 2022 to 2049.

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

Other Information (CONTINUED)

	54 Supervisory Board ¹
Andrea Orcel	Chairman
Florian Schwarz Dr Bernd Metzner Gianpaolo Alessandro	Deputy Chairmen
Sabine Eckhardt since 1 March 2022 Prof Dr Annette G. Köhler until 28 February 2022 Dr Claudia Mayfeld Fiona Melrose Claudia Richter Thomas Schöner Oliver Skrbot Christian Staack Gregor Völkl	Members
	1 As at 30 June 2022

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55 Management Board¹

Dr Michael Diederich	Spokesman of the Management Board People & Culture (including Labour and Social Affairs pursuant to Section 27 (2) 2 MgVG)
Marion Höllinger	Private Clients Bank
Dr Jürgen Kullnigg	Chief Risk Officer (CRO)
Jan Kupfer	Corporates
Christian Reusch	Client Solutions
Boris Scukanec Hopinski	Operations Germany (COO)
Ljubisa Tesić	Chief Financial Officer (CFO)
	1 As at 30 June 2022

Munich, 2 August 2022

UniCredit Bank AG The Management Board

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Höllinger

Märgen Untenig

Dr Kullnigg

Kupfer

Tesić

Dr Diederich

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Scukanec Hopinski

Declaration by the Management 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, 2 August 2022

UniCredit Bank AG The Management Board

Diedeich

Dr Diederich

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Höllinger

für fur llutten of

Dr Kullnigg

Kupfer

Reusch

Scukanec Hopinski

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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, faxing +49 (0)89 378-3325263 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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