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2021

Half-yearly Financial Report at 30 June 2021

Banking that matters.

HypoVereinsbank
Member of UniCredit

Disclaimer

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

	1/1–30/6/2021	1/1–30/6/2020
Net operating profit	€716m	€507m
Cost-income ratio (based on operating income)	67.7%	59.1%
Profit before tax	€617m	€496m
Consolidated profit	€358m	€329m
Earnings per share	€0.45	€0.41

Balance sheet figures/Key capital ratios

	30/6/2021	31/12/2020
Total assets	€334,091m	€338,124m
Shareholders' equity	€18,033m	€17,875m
Common Equity Tier 1 capital[1]	€15,301m	€15,122m
Core capital (Tier 1 capital)[1]	€17,001m	€16,822m
Risk-weighted assets (including equivalents for market risk and operational risk)	€85,157m	€80,637m
Common Equity Tier 1 capital ratio[1,2]	18.0%	18.8%
Core capital ratio (Tier 1 ratio)[1,2]	20.0%	20.9%
Leverage ratio in accordance with Commission Delegated Regulation[1,3]	5.1%	4.9%

1 31 December 2020: 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 30 June 2021 would amount to 4.5% (31 December 2020 in accordance with approved consolidated financial statements: 4.4%).

	30/6/2021	31/12/2020
Employees (in FTEs)	11,537	12,074
Branch offices	460	480

Ratings

	LONG-TERM	SHORT-TERM	OUTLOOK		CHANGE/ CONFIRMATION
Fitch Ratings					
Bank Ratings					
Derivative Counterparty Rating	BBB+(dcr)	—	—		10/5/2021
Deposit Rating	BBB+	F2	—		10/5/2021
Issuer Default Rating	BBB	F2	negative		10/5/2021
Stand-alone Rating	—	—	—	bbb	10/5/2021
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Preferred Debt Issuance Programme	BBB+	F2	—		10/5/2021
Non-preferred Senior Unsecured Debt	BBB	—	—		10/5/2021
Subordinated Debt	BB+	—	—		10/5/2021
Moody's					
Bank Ratings					
Counterparty Rating	A1	P-1	—		17/5/2021
Deposit Rating	A2	P-1	stable		17/5/2021
Issuer Rating	A2	—	stable		17/5/2021
Stand-alone Rating	—	—	—	baa2	17/5/2021
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	—	—		17/5/2021
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	—		24/6/2021
Issuer Credit Rating	BBB+	A-2	negative		24/6/2021
Stand-alone Rating	—	—	—	bbb+	24/6/2021
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Unsecured	BBB+	—	—		24/6/2021
Non-preferred Senior Unsecured Debt/ Senior Subordinated	BBB	—	—		24/6/2021
Subordinated Debt	BBB–	—	—		24/6/2021

Financial Review

Corporate structure

Legal corporate structure and organisation of management and control

In the first half of 2021, the legal corporate structure and the organisation of management and control remained unchanged compared with year-end 2020. Please refer to the "Corporate structure" section of Management's Discussion and Analysis in 2020 for statements in this connection.

There were no changes in the members of the Supervisory Board and the Management Board in the first half of 2021. The following changes occurred after 30 June 2021:

Supervisory Board

Mr Olivier Khayat and Ms Finja Kütz resigned from the Supervisory Board as shareholder representatives with effect from the end of 13 July 2021.

At the Extraordinary Shareholders' Meeting of UniCredit Bank AG on 14 July 2021, Mr Andrea Orcel and Ms Fiona Melrose were elected to replace them with effect from the end of that Extraordinary Shareholders' Meeting.

Mr Andrea Orcel was also elected as the Chairman of the Supervisory Board by resolution of the Supervisory Board. Mr Gianpaolo Alessandro was elected as a further Deputy Chairman. The order of the previous Deputy Chairmen remains unchanged.

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".

Team 23

In financial year 2021 as well, we continue to follow the guidelines of the four-year Team 23 strategic plan. This four-year planning is embedded in the group-wide Team 23 strategic plan, which is based on four pillars: grow and strengthen client franchise, transform and maximise productivity, disciplined risk management and controls as well as capital and balance sheet management.

In view of the changes in the Group Executive Committee of UniCredit S.p.A., a new strategic plan is currently under development and planned for approval in the second half of 2021.

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

No major corporate acquisitions or sales were made in the first half of the 2021 financial year.

Information on changes in the group of companies included in consolidation is provided in the Note "Companies included in consolidation".

Economic report

Underlying economic conditions

Economic growth[1]	First half 2021[2]	Full year 2020	Main drivers of development in the first half of 2021[3]
Global economy	6.1%[4]	(3.3%)	In the first half of the year, global economic growth picked up more strongly than expected mainly in the advanced economies. Private consumer spending in particular developed better due to the easing of restrictions.
Eurozone countries	5.4%	(6.7%)	In the eurozone, the GDP of the major economies also recovered significantly again in the second quarter of 2021. The reopening of the service sector contributed to this development to an especially large extent.
including: Germany	2.5%	(4.8%)	The recovery of business activity in Germany was supported in the first half of the year primarily by the marked recovery of service activities and the retail trade. However, global trade also had a bolstering effect.
USA	6.3%	(3.5%)	The sharp rise in US growth in the first half of the year was due to a strong revival in private consumption, triggered by the reopening of the economy, a substantial decline in the rates of new infections and high fiscal transfers.

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 2021 on the basis of estimated figures.
4 Source: full year value expected by UniCredit Research (figures for first half of 2020 are not available).

Sector-specific developments

After 2020, the COVID-19 pandemic dominated the development for banks again in the first half of 2021. Rising infection rates in autumn 2020 resulted in the reinstatement of restrictive measures that had an impact on economic development in 2021. In contrast to previous crises, there was no pro-cyclical tightening of banks' lending policies, mainly due to an expansionary monetary policy and government support measures. The results from the Bank Lending Survey in April 2021 revealed only a slight constraint on lending to companies in the first quarter, which was considerably better than banks' expectations in the fourth quarter of 2020.

In December 2020, the ECB yet again improved the TLTRO conditions for banks. The ECB increased the maximum TLTRO borrowing allowance and extended the term of the favourable pricing by twelve months from June 2021 to June 2022. This resulted in a renewed high uptake of TLTRO by banks in the first half of 2021 with a drawdown of €331 billion in March 2021 and €110 billion in June 2021. To date, banks have borrowed €2.2 trillion in TLTRO III funds from the ECB in total, which reflects the very attractive terms. The last two drawdown tranches will take place in September and December 2021.

Financial Review (Continued)

In 2020, the ECB also adopted another, temporary asset purchase programme named Pandemic Emergency Purchase Programme (PEPP) in addition to the existing Asset Purchase Programme (APP). The new programme contains government and private assets and has a total volume of €1.85 trillion. In addition, the ECB will reinvest all maturities in the PEPP until at least the end of 2023. By the end of June 2021, the ECB had already purchased assets totalling €1.18 trillion under the PEPP.

The temporary relaxation of the criteria for collateral relating to the refinancing of commercial banks with the ECB was extended from September 2021 to June 2022. This package of measures serves to cushion the stricter lending 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 can 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.

The monetary and fiscal policy measures taken created a significant narrowing of the risk premiums for European sovereign bonds as well as for corporate bonds, as a result of which the risk premiums for bank bonds also indirectly decreased. The spread between risk premiums for 10-year Italian sovereign bonds and German sovereign bonds, for example, widened from 160 basis points to more than 270 basis points in the first quarter of 2020 to narrow again to almost 110 basis points by the end of 2020 and remained on average at that level in the first half of 2021. This development is due to the significant increase of the ECB's purchases on the one hand and to political consensus on the issue of the EU Recovery Fund on the other. In the first half of 2021, the credit spreads of companies with good credit ratings continued to narrow by twelve basis points to a level of around 50 basis points. Risk premiums for banks followed a similar trend.

At the same time, the long end of the yield curve changed significantly in 2021. The three-month Overnight Index Swap (OIS) rate remained unchanged in 2021 at approximately negative 48 basis points but the 10-year Overnight Index Swap (OIS) rate rose from negative 34 basis points at the beginning of 2021 to positive three basis points by the end of June 2021. A steeper yield curve is generally positive for the profitability of maturity transformation for banks.

On the regulatory side, there were also comprehensive measures to support bank lending. Easing measures were extended for the most part. The ECB relaxed the minimum requirements for the shareholders' equity of banks. 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. There has been a shift in the timing of a number of planned changes in the CRR II, such as the option for banks to fulfil their Pillar 2 Requirements (P2R) with subordinated bonds instead of with Common Equity Tier 1 (CET1) capital. As regards the leverage ratio, banking supervisors are entitled, after consulting with the central bank concerned, to allow banks to exclude central bank exposures vis-à-vis central banks from their leverage ratio. In addition, several national regulators reduced countercyclical capital buffers. Pillar 2 Requirements and Pillar 2 Guidance for banks for 2021 have remained largely unchanged compared with 2020, reflecting the pragmatic approach of the ECB's supervision in the 2020 SREP process. Pillar 2 Guidance will only be adjusted in the course of the results for the 2021 bank stress tests.

In addition to the temporary easing of capital requirements, banking supervisors have advised banks to adopt a medium-term perspective when recognising credit impairment losses in accordance with IFRS 9. The measures for combatting the COVID-19 pandemic have led to significant distortions in the real economy. As a support measure, borrowers have been given the opportunity – based on legal regulations or by the banks bilaterally – to temporarily postpone the payment of loan instalments (COVID-19 loan moratoria). The medium-term perspective with regard to IFRS 9 enables banks to continue classifying most of the loans affected as performing loans. At the end of 2020, there was a sharp drop in the number of loans in moratorium and this trend continued in the first half of 2021.

At the end of March 2020, the Basel Committee on Banking Supervision had already postponed the introduction of the Basel IV standard from 2022 to 2023. Furthermore, the stress test for European banks scheduled for 2020 was postponed for one year to 2021. In the area of state aid law, the framework conditions for possible government support measures for the banking sector were relaxed in 2020 and this exception has currently been extended to the end of 2021. 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 interim target for the beginning of 2022 and the final requirements in 2024.

Equity markets continued their recovery in the first half of 2021. In the first half, the Euro STOXX 50 was up by 14 percent. While bank shares lagged behind the overall market in 2020, the STOXX Europe 600 Banks index increased by an above-average rate of 27 percent in the first six months of 2021, driven primarily by the more favourable economic outlook, better development in terms of credit quality and a steeper yield curve. Moreover, the indicated withdrawal of restrictions on dividend payments from 1 October 2021 by the ECB has already had a positive impact on valuations. In March 2020, the ECB recommended that banks refrain from making dividend payments to external investors and share buybacks at top group level. In December 2020, the ECB changed its recommendation. Dividend payments and share buybacks are again possible within certain limits in the first three quarters of 2021. Dividend payments should not account for more than 15 percent of the accumulated profit for 2019 and 2020 and should not exceed 20 basis points of the CET1 ratio. Restrictions on dividends and share buybacks will end from October 2021. In addition, the ECB clearly stated that the distribution restrictions are generally not applicable to dividend payments within the banking groups under the supervision of the ECB.

In the USA, the yield on ten-year US treasury bonds rose significantly from 0.9 percent at the end of 2020 to more than 1.7 percent in March 2021 but then fell again to 1.4 percent. Both the US Federal Reserve Bank and the European Central Bank left interest rates unchanged in the first half of 2021. In the first six months of 2021, the yield on the ten-year bonds of the Federal Republic of Germany rose from minus 0.6 percent at the beginning of 2021 to minus 0.2 percent as at 30 June 2021. In the first half of the year, the three-month Euribor remained almost constant in the range of negative 53 to negative 55 basis points.

In the first half of 2021, the euro depreciated slightly by 3 percent against the US dollar, caused among other things by the faster economic recovery of the US economy.

The topic of sustainability continued to gain importance for the banking sector in 2021. On the one hand, there was a significant increase in the share of ESG-compliant issues in the banking sector. In the first half of 2021, around one fifth of the bonds issued in the banking sector were already 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 toclimate change. Compared with the draft published in November 2020, the legal acts contain substantial changes to the criteria for buildings and thus the admissibility of energy-efficient mortgages as sustainable economic activities and green assets. The European Banking Authority (EBA) has also proposed a new ratio – the green asset ratio. This is intended to increase transparency for investors, and banks are required to publish this new ratio in 2022 for the first time. In addition, risks entailed in climate change are increasingly becoming a focus of banking supervision and will be examined more closely in the course of a stress test.

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.

	1/1–30/6/2021	1/1–30/6/2020	CHANGE	
INCOME/EXPENSES	€ millions	€ millions	€ millions	in %
Net interest	1,167	1,291	(124)	(9.6)
Dividends and other income from equity investments	16	6	+ 10	>+ 100.0
Net fees and commissions	581	526	+ 55	+ 10.5
Net trading income	423	258	+ 165	+ 64.0
Net gains/(losses) on financial assets and liabilities at fair value	44	(206)	+ 250	
Net gains/(losses) on derecognition of financial instruments measured at cost	(1)	2	(3)	
Net other expenses/income	(116)	504	(620)	
of which net valuation/disposal of investment properties	13	(1)	+ 14	
OPERATING INCOME	**2,114**	**2,381**	**(267)**	**(11.2)**
Payroll costs	(733)	(725)	(8)	+ 1.1
Other administrative expenses	(641)	(620)	(21)	+ 3.4
Amortisation, depreciation and impairment losses on intangible and tangible assets	(58)	(62)	+ 4	(6.5)
Operating costs	**(1,432)**	**(1,407)**	**(25)**	**+ 1.8**
OPERATING PROFIT/(LOSS)	**682**	**974**	**(292)**	**(30.0)**
Credit impairment losses IFRS 9	34	(467)	+ 501	
NET OPERATING PROFIT/(LOSS)	**716**	**507**	**+ 209**	**+ 41.2**
Provisions for risks and charges	(88)	8	(96)	
Restructuring costs	—	(19)	+ 19	(100.0)
Net gains/(losses) on disposals of investments	(11)	—	(11)	
PROFIT BEFORE TAX	**617**	**496**	**+ 121**	**+ 24.4**
Income tax for the period	(259)	(167)	(92)	+ 55.1
PROFIT AFTER TAX (CONSOLIDATED PROFIT/(LOSS))	**358**	**329**	**+ 29**	**+ 8.8**
attributable to the shareholder of UniCredit Bank AG	358	329	+ 29	+ 8.8
attributable to minorities	—	—	—	—

Net interest

In the reporting period, net interest came to €1,167 million compared with €1,291 million in the previous-year period and was thus a significant €124 million or 9.6% lower than the previous-year figure. Net interest in the previous-year period includes interest income from a tax refund of €62 million that did not accrue again in the reporting period.

Dividends and other income from equity investments

Dividends and other income from equity investments amounted to €16 million in the reporting period, which represents a sharp increase of €10 million. The increase compared with the previous-year period is primarily due to the income of €10 million from companies accounted for using the equity method (previous-year period: €0 million). Here, there was a markedly positive effect from the sale of another division of Comtrade B.V., an associate accounted for using the equity method.

Net fees and commissions

In the reporting period, net fees and commissions amount to €581 million and are thus a significant €55 million or 10.5% higher than the previous-year period. The main reason for the rise in net fees and commissions is greater demand from companies for equity and borrowings using capital market products and higher commission in the lending business.

The fee and commission income that may no longer be recognised through profit or loss due to the judgement by the German Federal Court (Bundesgerichtshof – BGH) on the invalidity of certain clauses in the General Business Conditions totalled a mid-single-digit million amount in the second quarter when the BGH judgement was delivered. HVB Group set aside a provision for claims to the reimbursement of fee and commission income earned up to and including the first quarter of 2021 on the basis of the clauses in the General Business Conditions that are now no longer valid.

Net trading income

In the reporting period, there was a sharp increase of €165 million, or 64.0%, to €423 million in net trading income. A decline in valuation discounts in the context of the fair value measurement of derivatives, particularly credit value adjustments and funding value adjustments, had a positive effect in this connection and resulted in income of €157 million. In the previous-year period, an increase of €216 million in valuation discounts was recorded as an expense, which was partly due to the market turbulence surrounding the COVID-19 pandemic. In addition, the favourable development in customer business in the areas of fixed income products as well as equity and commodity products had an impact in the first half of 2021.

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

A gain of €44 million is reported for financial assets and liabilities at fair value in the reporting period, which is a sharp €250 million higher than the loss of €206 million reported in the previous-year period. The loss of €50 million on financial liabilities designated at FVTPL in the previous-year period decreased to €32 million in the first half of 2021. A gain of €22 million was generated in financial liabilities designated at FVTPL in the first half of 2021 compared with a loss of €158 million in the previous-year period. In addition, this item includes hedge accounting effects of €44 million (previous-year period: minus €20 million) and the fair value measurement of equity instruments of €9 million (previous-year period: €10 million). Income of €1 million was generated from derecognition from OCI in the reporting period (previous-year period: €12 million).

Financial Review (Continued)

Net gains/(losses) on derecognition of financial instruments measured at cost
This item reports a loss of €1 million compared with a gain of €2 million in the first half of 2020. The result is thus considerably lower than the previous-year figure. The item mainly includes gains on the sale of assets measured at cost. These are generally intended to be held and are sold only in exceptional cases.

Net other expenses/income
The item "Net other expenses/income" shows an expense of €116 million for the reporting period and as a result of declining by €620 million, it is a sharp € 620 million lower than the net income of €504 million in the previous-year period. The decline is mainly due to a rise in expenses of €67 million for the bank levy and the non-recurrence of income from the sale of land and buildings of €549 million generated in the previous-year period. The sales involve the sale of the "Am Tucherpark" site at the beginning of 2020 in particular.

In this context, it should be noted that according to IFRIC 21 the bank levy for the respective financial year must be recognised in full as an expense at the beginning of the year. At €193 million in the reporting period (€126 million in the previous-year period), this is the largest single item among other expenses/income. The rise in the bank levy is partly attributable to the fact that for the first time in 2021, HVB Group has waived the option of providing 30% of the annual contribution in the form of fully secured irrevocable payment commitments, as in previous years, which were not recognised as an expense. HVB Group has adapted to UniCredit's approach in this respect.

Operating costs
Operating costs came to €1,432 million in the reporting period and were thus only a slight €25 million or 1.8% above the previous-year's figure of €1,407 million. This shows that HVB Group has succeeded in keeping costs stable to a large extent.

Operating profit (before credit impairment losses IFRS 9)
Operating profit (before credit impairment losses IFRS 9) amounted to €682 million in the reporting period and thus fell sharply by €292 million compared with the previous-year figure of €974 million. The lower operating income is largely due to the decline in the item "net other expenses/income", which fell a very substantial €620 million. This item was affected by the non-recurrence of the gains on the sale of land and buildings of €549 million generated in the previous year (primarily on the sale of the "Am Tucherpark" site) and the increase of €67 million in the bank levy. This was offset by increases of €250 million in net gains/(losses) on financial assets and liabilities at fair value and of €165 million in net trading income. In total, there was a decline of €267 million in operating income. The slight rise of €25 million in operating costs resulted in a decline of €292 million in operating profit (before credit impairment losses IFRS 9).

The cost-income ratio (ratio of operating costs to operating income) thus distinctly deteriorated to 67.7% in the reporting period after 59.1% in the previous-year period.

Credit impairment losses IFRS 9
In the reporting period, a net income of €34 million was generated from the reversal of credit impairment losses whereas an expense of €467 million accrued in the previous-year period. The marked recovery in economic activity had an impact on this development, whereas the first half of 2020 was weighed down by the effects of the COVID-19 pandemic.

Portfolio valuation allowances totalling €10 million were reversed in the first half of 2021, while there was an addition of €274 million in the previous-year period. In the reporting period, the adjustment of the assumptions used to reflect future economic conditions had a positive effect, particularly the adjustment of the growth rates for the gross domestic product based on the economic recovery that is setting in. This effect was almost offset by the introduction of new PD models for retail and business customers. Effects resulting from rating adjustments for existing credit exposures and transfers between Stages 1 and 2 have also largely cancelled each other out, leaving a reversal of €10 million in general loan-loss provisions. In the previous-year period, the pandemic-driven adjustment of the assumptions used to reflect future economic conditions had a negative impact and in total resulted in an addition of €274 million in general loan-loss provisions.

In addition, there was a reversal of specific valuation allowances of net €24 million in the reporting period. Additions to specific valuation allowances on account of defaults were overcompensated by reversals of existing specific valuation allowances. The feared wave of COVID-19-related defaults has not occurred to date, partly as a result of an improved macroeconomic environment. In contrast, an addition of €193 million in specific valuation allowances was necessary in the previous-year period on account of a few larger individual cases.

Provisions for risks and charges
In the reporting period, net expenses from the addition of provisions for risks and charges amounted to €88 million. This is offset by net income of €8 million reported in the previous-year period from the reversal of provisions. Individual items of significance in the reporting period relate to the setting aside of a provision of €69 million in penalty payments to the EU Commission, which imposed these in the second quarter for infringing cartel law in connection with EU government bonds. Otherwise, a provision in the high single-digit millions was set aside for the consequences of the BGH judgement on the invalidity of certain clauses in the General Business Conditions.

Net gains/(losses) on disposals of investments
In the reporting period, net losses of €11 million accrued, whereas in the previous-year period no gain or loss was generated on the disposal of investments. The losses relate above all to the result from the deconsolidation of 17 subsidiaries that were deconsolidated on grounds of immateriality. In this context, various minor effects had an impact, which were posted in the respective subsidiaries but were not reflected in HVB Group. Therefore, these matters were derecognised through profit or loss in the course of the deconsolidation.

Profit before tax, income tax for the period and consolidated profit
In the reporting period, HVB Group generated profit before tax of €617 million, which is a sharp €121 million or 24.4% higher than the profit before tax of €496 million generated in the previous-year period. While operating profit (before credit impairment losses IFRS 9), at €292 million, was lower than the previous-year figure, the decline of €501 million in credit impairment losses IFRS 9 more than offset this lower amount due to a positive balance from the net reversal of impairments totalling €34 million in the reporting period.

Income tax expense amounted to €259 million in the reporting period and was thus also €92 million or 55.1% sharply up on the income tax expense of €167 million in the previous-year period, partly as a result of the increase in profit.

After deducting income tax, HVB Group generated consolidated profit of €358 million in the reporting period, which represents a significant increase of €29 million or 8.8% compared with the consolidated profit of the previous-year period of €329 million.

Financial Review (Continued)

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) as a ratio of 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 11.75 percent equity is allocated to the average risk-weighted assets. In the reporting year, this ratio rose to 7.3 percent compared with 4.3 percent in the previous year.

Segment results by operating segment
The structure of the income statement used for internal management purposes is shown; any deviations to the presentation in the operating performance are described in the Note "Income statement, broken down by operating segment" in the consolidated financial statements. All the operating segments generated a profit before tax or a consolidated profit in the reporting period.

(€ millions)

OPERATING INCOME	1/1–30/6/2021	1/1–30/6/2020
Commercial Banking	1,195	1,208
Corporate & Investment Banking	1,033	669
Other	26	32
Consolidation	(6)	(7)
Total	**2,248**	**1,903**

(€ millions)

PROFIT/(LOSS) BEFORE TAX	1/1–30/6/2021	1/1–30/6/2020
Commercial Banking	196	79
Corporate & Investment Banking	402	(186)
Other	4	549
Consolidation	—	—
Total	**602**	**442**

(€ millions)

CONSOLIDATED PROFIT/(LOSS)	1/1–30/6/2021	1/1–30/6/2020
Commercial Banking	119	90
Corporate & Investment Banking	225	(174)
Other	2	320
Consolidation	—	—
Total	**346**	**235**

Financial situation
Total assets
The total assets of HVB Group fell by €4.0 billion, or 1.2%, to €334.1 billion at 30 June 2021 compared with year-end 2020.

On the assets side, cash and cash balances showed a stable development and amount to €47.5 billion at 30 June 2021 compared with €47.5 billion at year-end 2020.

By contrast, financial assets held for trading increased distinctly by €2.9 billion to €85.6 billion, mainly on account of the increase in other financial assets held for trading (up €6.0 billion), fixed-income securities (up €3.5 billion) and equity instruments (up €1.6 billion). A development in the opposite direction was seen in the positive fair values of derivative instruments (down €8.2 billion).

The portfolio of financial assets at FVTPL, which consists mainly of securities, fell sharply by €1.7 billion to €9.8 billion compared with year-end 2020.

By contrast, financial assets at FVTOCI, which consists exclusively of securities, increased year on year by a distinct €0.4 billion to €12.9 billion.

Loans and receivables with banks fell significantly by €4.1 billion to €29.8 billion, which is mainly attributable to decreases of €4.0 billion in reverse repos and €2.4 billion in cash collateral. In contrast, there were increases of €1.2 billion in current accounts, €0.8 billion in securities and €0.3 billion in other loans to banks.

Loans and receivables with customers were down slightly by €1.2 billion to €143.0 billion. This decline is primarily due to the lower reverse repos (down €2.1 billion) and cash collateral (down €0.6 billion), while current accounts (up €1.2 billion) and securities (up €0.7 billion) were higher. Other changes resulted in another net decline of €0.4 billion.

The item “Non-current assets or disposal groups held for sale” fell sharply by €0.2 billion to €0.6 billion. This decline is primarily attributable to the normal course of business of the subsidiary Wealth Management Capital Holding GmbH, which is planned to be sold.

On the liabilities side, the item “Deposits from banks” rose a distinct €4.9 billion to €78.4 billion. The main increases within this total were €6.6 billion in deposits from central banks, €1.1 billion in other liabilities and €0.9 billion in term deposits. By contrast, decreases were posted in repos (down €3.1 billion) and cash collateral (down €0.6 billion). Deposits from central banks were affected by the participation in the TLTRO III programme, under which HVB Group raised further funds in the first half of 2021.

There was a marked decrease of €6.8 billion to €137.0 billion in deposits from customers. This decrease is primarily due to the decline in repos (down €6.6 billion), term deposits (down €4.7 billion) and cash collateral (down €1.6 billion). By contrast, there were increases of €5.2 billion in current accounts, €0.6 billion in savings deposits and €0.3 billion in other liabilities.

Compared with year-end 2020, there was a slight increase in debt securities in issue, which were up by €0.5 billion to €32.2 billion.

Financial liabilities held for trading fell slightly by €1.3 billion to €55.6 billion compared with year-end 2020. An amount of €4.8 billion of this decrease is attributable to the negative fair values from derivative financial instruments, whereas other financial liabilities held for trading posted an increase of €3.5 billion.

At €5.7 billion, financial liabilities at FVTPL were almost unchanged at 30 June 2021 compared with year-end 2020.

Shareholders’ equity shown in the balance sheet increased slightly by €0.2 billion to €18.0 billion at the reporting date. The main reason for this rise is the €0.4 billion in consolidated profit for the first half of the year and the increase of €0.2 billion in other reserves to €3.7 billion. The decline of €0.4 billion in the profit available for distribution, which is attributable to the intragroup dividend payment made for 2020, had the opposite effect.

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 €84.0 billion at the reporting date compared with €85.3 billion at the end of the previous year. This figure includes contingent liabilities in the form of financial guarantees of €26.4 billion (year-end 2020: €24.6 billion) and other commitments of €57.6 billion (year-end 2020: €60.7 billion) almost exclusively related to irrevocable credit commitments. These contingent liabilities are offset by contingent assets of the same amount.

Risk-weighted assets, key capital ratios, liquidity 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 €85.2 billion at 30 June 2021 and were thus €4.6 billion higher than at year-end 2020 (€80.6 billion). This is mainly due to the risk-weighted assets for credit risk (including counterparty default risk), which rose by €5.0 billion to €67.9 billion. Furthermore, the risk-weighted asset equivalents for operational risk increased by €0.3 billion to €9.0 billion. The risk-weighted assets for market risk fell by €0.7 billion to €8.3 billion.

At 30 June 2021, Common Equity Tier 1 capital compliant with the CRR II excluding hybrid capital (CET1 capital) amounted to €15.3 billion and Tier 1 capital to €17.0 billion. The Tier 1 capital rose slightly compared with year-end 2020 (€16.8 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) amounted to 18.0% and 20.0% respectively at 30 June 2021 (31 December 2020: 18.8% and 20.9% respectively). Own funds came to €18.3 billion at 30 June 2021 (31 December 2020: €18.1 billion in accordance with approved consolidated financial statements). The own funds ratio was 21.5% at 30 June 2021 (31 December 2020: 22.5%). The decline in the ratios is attributable to the increase in risk-weighted assets.

Financial Review (Continued)

The leverage ratio is determined by setting the Tier 1 capital measure against 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 5.1% at 30 June 2021 (31 December 2020 in accordance with approved consolidated financial statements: 4.9%). Article 429a paragraph 1 n) CRR II on the temporary exclusion of certain exposures to central banks from the total exposure measure (31 December 2020: Article 500b CRR II from 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 30 June 2021 would amount to 4.5% (31 December 2020 in accordance with approved consolidated financial statements: 4.4%).

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.

Moody's affirmed HVB's ratings on 17 Mai 2021 and adjusted the outlook from "negative" to "stable". Among others, the counterparty risk rating (CRR) was affirmed at A1/P-1, the rating for senior unsecured debt instruments at A2/P-1, the deposit rating at A2/P-1 and HVB's stand-alone rating was also affirmed at 'baa2'. From Moody's perspective, the latter reflects the proven resilience of HVB's financial strength amid the difficult operating environment due to the COVID-19 pandemic last year. In view of the strong capital base and good liquidity position, HVB is 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 government COVID-19 support measures. The "stable" outlook reflects Moody's expectation that despite any deterioration in asset quality, HVB's financial profile will not change significantly. On 12 July 2021, the ratings for non-preferred senior unsecured debt instruments were raised from Baa3 to Baa2 as a result of the Moody's updated banking methodology.

On 10 May 2021, Fitch affirmed HVB's ratings (including the senior preferred and the deposit rating at BBB+/F2, the senior non-preferred rating at BBB and the stand-alone rating 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. The outlook remains "negative" as Fitch assumes that the fungibility of capital and liquidity could increase and thus the financial flexibility of HVB might be restricted if UniCredit implements its "single-point-of-entry" resolution strategy.

In the course of a European-wide review of the banking sector, S&P lowered the anchor rating for the German banking sector from 'a-' to 'bbb+' on 24 June 2021. This downgrade is mainly due to the challenges in profitability and the slow progress made in digitalisation. HVB's ratings were nevertheless affirmed as the increased risk, driven by the structural challenges for the German banking landscape, is already adequately reflected in HVB's rating. In S&P's rating assessment, HVB's ratings are supported above all by a strong capital base and the Bank's solid market position in corporate banking so that HVB's ratings are one notch above the ratings of UniCredit S.p.A. despite the operating interdependencies between HVB and UniCredit.

The resolution counterparty rating thus remains at A-/A-2, the issuer credit rating and the rating for senior preferred debt instruments of HVB at BBB+/A-2 and the senior subordinated debt rating at BBB. The negative outlook for the issuer credit rating of HVB indicates 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 2021 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 2020 Annual Report.

General economic outlook

The impact of the COVID-19 pandemic on global economic development gradually eased off in spring 2021 and is expected to lessen further in the course of the year. The progress made in vaccination campaigns and the restrictive measures that are partially still in place have flattened the epidemic curves in many countries. Nevertheless, there are risks entailed in emerging virus variants and the growing numbers of new infections in some regions and countries, such as in the United Kingdom. According to Johns Hopkins University, more than 180 million people worldwide have been infected with the SARS-CoV-2 coronavirus (as at the beginning of July 2021). Measured in absolute figures, the USA is by far the country most severely affected in the world by the pandemic, followed by India and Brazil. Among the most severely affected countries in Europe are the United Kingdom, Italy, Spain, France and Germany.

After the slump of 3.3 percent in global output in 2020, HVB Group expects an increase of 6.1 percent in 2021 since the restrictive measures serving to mitigate the COVID-19 pandemic, which weighed on economic activity, will be reduced further (current status as at June 2021; cf. publication by UniCredit Research, The UniCredit Economic Chartbook, "Recovery strengthens, price pressures won't last", published on 30 June 2021). In particular, the earlier-than-expected withdrawal of restrictive measures in spring 2021 has led to a stronger recovery in private consumption than originally expected, especially in the advanced economies. By contrast, economic recovery in several large threshold countries has lost momentum as the introduction of the vaccine lagged behind that of the advanced economies by a long way and some of those countries are recording increasing new infection rates. Downside risks primarily arise from the spread of new virus variants. In addition, supply bottlenecks and stronger demand in the course of the revival of national economies have resulted in higher input prices and a limited transfer of these costs to consumer prices in the short term. However, these effects should only be of a temporary nature. China is likely to maintain its robust recovery, although at a less dynamic pace as the gradual reduction in fiscal and monetary support measures and production bottlenecks are likely to slow down the upswing.

The persistent trade tensions between the USA and China are a source of additional risks for the global economy. As regards the trade dispute between Europe and the USA, HVB Group does not expect the USA to impose any further tariffs on European imports. Despite the conclusion of a Brexit agreement at the end of 2020 between the United Kingdom and the EU, the bureaucratic efforts entailed in handling goods are likely to continue to adversely affect trade between the two economic areas in this year. Little risk is currently seen that the budget negotiations between Italy and the EU Commission could weigh on the markets this year. The new cabinet under the leadership of former ECB President Mario Draghi has committed itself to reforms on several occasions.

The US economy is likely to expand by 6.6 percent in 2021 (UniCredit Research, The UniCredit Economics Chartbook, "Recovery strengthens, price pressures won't last", published on 30 June 2021) after contracting by 3.5 percent in the previous year. HVB Group assumes that the US economy already surpassed the GDP level from before the COVID-19 pandemic in the second quarter of this year. The daily new infection rates are currently at the lowest level since March 2020 and the vaccination campaign is progressing, although at a slower pace than a few months ago. Private consumer spending rose recently, driven by the reopening of the economy and substantial tax transfers. HVB Group expects the US Congress to pass a longer-term economic plan of additional spending totalling USD 2-3 trillion over the next decade, funded in part by USD 1 trillion in higher taxes.

Financial Review (Continued)

During the COVID-19 pandemic, the US Federal Reserve (Fed) lowered the key interest rate to the range of 0 to 0.25 percent and, at its last meeting in June, indicated two interest rate hikes by 25 basis points by the end of 2023. At its meeting in March, it did not anticipate any such hike in interest rates before the end of 2023. This change in plan is likely to be due to concerns about the upside risks to inflation. The Fed is expected to discuss a plan for tapering its bond purchases at one of its next meetings. HVB Group assumes that a formal announcement will be made in December that tapering will begin in January 2022. The tapering process is likely to last about one year and in view of the increase in real estate prices, the US Federal Reserve might cut back purchases of mortgage-backed securities (MBS), which means that net purchases of MBS would end before the net purchases of government bonds are discontinued.

For the eurozone, HVB Group expects a 4.5 percent increase in GDP in 2021 (UniCredit Research, The UniCredit Economics Chartbook, “Recovery strengthens, price pressures won’t last”, published on 30 June 2021). The GDP level before the COVID-19 pandemic is likely to be reached again in the first quarter of 2022. Business surveys have improved considerably in recent months as a result of the revival in the service sector. Activity in the manufacturing industry remains solid despite the exacerbation of supply bottlenecks and a further increase in production costs. Indicators of sales price expectations show that companies are increasingly passing on the higher input costs. This applies particularly to sectors producing inputs and capital goods but less for those producing consumer goods. The greatest uncertainty is the extent to which this inflationary pressure will ultimately spread to consumer prices. The effects of the EU Recovery Fund (Next Generation EU) on growth are likely to be small in 2021 and only increase in the coming years.

The European Central Bank (ECB) has left its refinancing rate unchanged at zero during the COVID-19 pandemic and recently increased its temporary Pandemic Emergency Purchase Programme (PEPP) in the amount of €750 billion by €500 billion. The extent to which the ECB will extend the PEPP to beyond March 2022 is unclear. However, phasing out the PEPP in March would pose significant challenges as it is assumed that not all the countries in the eurozone will have recovered to their GDP level from before the crisis by that time and the medium-term inflation forecasts will almost certainly remain way below the target figure of 2 percent. The need to maintain significant economic stimulus and a smooth transmission of this to all member states would then require a considerable increase in the standard QE programme, as well as greater flexibility of the programme based on the PEPP model and more forward guidance for reinvestments. The rhetoric on euro appreciation remains unchanged and confirms HVB Group’s opinion that the euro exchange rate has not yet reached the ECB’s absolute limit.

On a country level (UniCredit Research, The UniCredit Economics Chartbook, “Recovery strengthens, price pressures won’t last”, published on 30 June 2021), HVB Group forecasts an increase in GDP in Germany of 3.5 percent this year compared with the previous year (GDP growth in 2020: down 4.8 percent). In France, GDP in 2021 is set to increase by 5.2 percent compared with the previous year (GDP growth in 2020: down 8.0 percent). This year, HVB Group expects Italy’s economic output to increase by 5.0 percent compared with the previous year (GDP growth in 2020: down 8.9 percent), while Spain is likely to record an increase of 5.1 percent (GDP growth in 2020: down 10.8 percent). The UK economy will probably increase by 6.9 percent this year (GDP growth in 2020: down 9.8 percent).

According to HVB Group's assessment, the German economy in the second quarter of 2021 is at a turning point where it has started to expand again thanks to the revival of the economy and a recovery in service activities. The export-oriented manufacturing industry continues to benefit from the strong upturn in global trade, although severe supply bottlenecks will dampen the increase in industrial activities (including construction) at least in the short term. As production cannot be ramped up much by companies and inventories of finished goods are already at a record low, export growth is also likely to be less dynamic. After the summer break, the German economy should again experience a stronger revival, driven by significant progress made in the vaccination campaign and the reduction in pent-up demand of private households and companies. Risks for this forecast are the emergence of new virus variants and the historically large supply bottlenecks in the manufacturing industry and construction sector. At the turn of the year, HVB Group expects the growth momentum to slow down again. In the course of the recovery, the German economy should again reach the GDP level it had before the COVID-19 pandemic in the third quarter of 2021.

Banking sector development in 2021

The European banking sector was in a good starting situation in 2020 when the pandemic began. The capital base, asset quality and liquidity had been substantially strengthened in the years previously. Despite the crisis, the banking sector managed to further improve its capital base, liquidity position and asset quality in 2020.

Relatively low profitability remains a weak point in the European banking sector, which has been below the profitability of US banks since the financial crisis. In 2020, the profit development of banks came under additional pressure as banks were required to set aside significantly higher loan-loss provisions. On average, the return on equity of European banks was a mere 1.6 percent compared with 6.5 percent in 2019 (data from the European Banking Authority, EBA). European banks posted loan-loss provisions in 2020 that were almost twice as high as those in 2019, which had a distinctly negative impact on profit. However, market sentiment brightened again in the second half of the year and banks and analysts (Bloomberg consensus estimate) expect lower loan-loss provisions in 2021 compared with 2020. In addition, net interest income came under pressure as a result of the persistently low level of interest rates, slack growth in loan volumes and an increase in state-guaranteed loans that have a lower margin. However, the situation improved in the first quarter of 2021 with the return on equity reaching 7.6 percent. In principle, sound profitability is an initial buffer against higher loan-loss provisions. Conversely, banks with lower profitability are harder hit by a crisis, as a significant increase in loan-loss provisions usually leads to a negative net result and thus weighs directly on equity. On the monetary policy side, the prolongation of the favourable TLTRO III conditions until June 2022 is having a positive effect on the net interest income of banks.

On the structural side, the profitability of European banks will continue to improve. Firstly, strong growth was seen in digital customer interaction in 2020 and the structural adjustment of branch networks will continue to accelerate. Furthermore, there was a revival of bank mergers in Spain and Italy, which is likely to boost profitability in the medium term. On the costs side, most banks are also planning to reduce office space. Moreover, the trend towards streamlining and focusing banks' business models that concentrate on core areas with higher margins is continuing.

Financial Review (Continued)

Despite the crisis, asset quality continued to improve in 2020, above all due to continued active NPL sales. The rate of impaired loans fell to 2.5 percent at the end of March 2021, compared with 2.7 percent at the end of 2019 and 6.4 percent at the end of 2014 (EBA data). Comprehensive state support measures, loan guarantees and payment moratoria for loan payments helped to staunch the inflow of impaired loans until now, despite the sharp economic decline in 2020. A major factor is the extensive use of payment moratoria and state guarantees. At the end of March 2021, only €203 billion or 1.7 percent of all the loans to households and companies still had a payment moratorium (EBA data). Although the volume of loans with a payment moratorium has fallen significantly from over €800 billion in mid-2020, this has not yet resulted in a significant rise in NPL inflows to date. Stronger borrowers tended to leave the moratoria agreements earlier than planned. There was also a substantial rise in state-guaranteed loans to €378 billion or 6.6 percent of all loans to companies (EBA data at the end of March 2021). However, the asset quality of European banks will be adversely affected by the crisis but with a significant time lag.

Due to the more medium-term perspective in the application of IFRS 9 encouraged by the supervisory authorities, most loans with a payment moratorium were not classified as non-performing, although some of these loans are likely to be non-performing once the payment moratoria expire. The numerous state support programmes for businesses and guarantee programmes for loans have had a positive impact in this respect: on the one hand, by preventing an increase in the default rate of corporate loans and, on the other hand, by reducing the losses for banks when a loan with a state guarantee granted as a support measure defaults.

The performance of banks in the area of net interest income is under continued strain due to margin pressure. The improved TLTRO III conditions will compensate in part for the negative impact on net interest income. In addition, 2020 was a record year for the fixed income area in investment banking, driven by very high volatility, which contributed to higher income and this positive momentum continued in the first quarter of 2021.

Banks' capital ratios came under pressure at the beginning of 2020, partly due to record drawings on credit lines granted, resulting in higher risk-weighted assets, and partly due to higher loan-loss provisions. The high volatility on the markets also had a negative effect on the equity of some banks. The ECB's recommendation to suspend dividends and refrain from share buybacks, the CRR quick fix, the state guarantee framework for corporate loans as well as a partial repayment of drawn credit lines by companies had a positive effect on capital ratios. European banks' average capital ratio of 15.6 percent (fully loaded view) at the end of March 2021 was significantly higher than the level of 15.0 percent at the end of 2019 (EBA data). The ECB's restrictions concerning the profit distribution of banks continue to apply until the end of September 2021, after which the ECB has indicated that banks will be able to decide on profit distributions again at their own discretion. The results of the ECB's stress tests, which were published on 30 July 2021, provide insight into the resilience of the banking sector as another recession is simulated for 2021 to 2023 (EBA stress test scenarios). The results of the stress tests will play an important role in capital requirements in 2022.

Development of HVB Group

We expect a distinct economic recovery in the second half of 2021 and in 2022. The current wave of COVID-19 and the related lockdown measures in the eurozone caused a technical recession in the first quarter of 2021. The phase of economic weakness subsided in the second quarter of 2021 and a recovery set in. Due to the warmer weather in the summer, the introduction of a series of vaccines and the progress made in vaccinations, it will probably be possible to lift most of the lockdown measures which, in turn, should buoy up market sentiment. This is likely to lead to significant economic recovery in the second half of 2021 and in 2022.

As previously described in the "Team 23" section, we continue to follow the guidelines of the four-year Team 23 strategic plan that is embedded in the group-wide Team 23 strategic plan. The statements below on future development are based on HVB Group's corporate planning and thus on the rules regarding the segmented income statement.

Compared with the first half of 2021, we expect a substantial increase in net write-downs of loans and provisions for guarantees and commitments in the second half of 2021. While there was a net reversal of impairment losses in the first half of 2021, we project additions to loan-loss provisions in the second half of the year. Net write-downs of loans and provisions for guarantees and commitments for the whole of 2021 will nevertheless be significantly lower than last year's level due to the improved macroeconomic framework conditions in the first half of the year. Performance in 2021 is to be seen in the light of the COVID-19 pandemic.

Despite the ongoing COVID-19 pandemic, we expect HVB Group to generate profit before tax for the 2021 financial year that we consider to be solid, given the present circumstances. Operating income in the first half of the year benefited from a strong start to the year; we expect the positive trend to level off slightly in the second half of 2021. We project a slight decline in operating costs in the second half of 2021 over the first half of 2021. Compared with 2020, we thus project a slight improvement in the cost-income ratio for 2021, which will be slightly higher in the second half of 2021 than in the first half. In the second half of 2021, both operating profit before tax and operating profit after tax are likely to be significantly lower than the respective results in the first half of 2021 due to the development of operating profit and net write-downs for loans and provisions for guarantees and commitments.

We expect the recovery effect, which was already observed in the second half of 2020 and in the first half of 2021, to continue in all areas of business in the second half of 2021, albeit at a somewhat slower pace than in the first half of 2021. The improvement in net operating profit of the Corporate & Investment Banking operating segment in the first half of 2021 will continue in the second half of 2021 but at a weaker rate. For the Commercial Banking operating segment, the positive trend in the first half of 2021 is also projected to level off in the second half of 2021 after the good start to the year. For the Other operating segment, we likewise expect a substantial decline in the second half of 2021.

For the 2021 financial year, we anticipate a solid capital base for HVB Group with a CET1 capital ratio that is slightly lower than the figure in 2020.

The opportunities in terms of future business policy and corporate strategy, performance and other opportunities were described in detail in the 2020 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 2020 Annual Report in the section entitled "Opportunities in terms of future business policy and corporate strategy, performance and other opportunities". The statements made in that section continue to apply.

HVB Group is divided into the following operating segments:
– Commercial Banking
– Corporate & Investment Banking
– Other

For the first time in the 2021 half-year, the Group Corporate Centre will be reported under the Commercial Banking operating segment and not as a separate operating segment. The previous-year figures have been adjusted accordingly. In the past, both areas were reported individually as operating segments. 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, counterparty, issuer or country). This potential loss in the value of a credit exposure may be due to a default by the contracting party, meaning it is 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 subsidiaries (owned or leased), real estate holding companies and their special purpose vehicles (SPVs) as well as investment companies. 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 are not included in 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 2021, these planning scenarios, also referred to as adverse scenarios, have been adapted against the backdrop of the COVID-19 pandemic. Each of the scenarios simulates a different development of the COVID-19 pandemic. Whereas the first scenario assumes further waves of infections and thus more of a W-shaped economic recovery from the COVID-19 pandemic, the second scenario is based on a U-shaped economic recovery after the COVID-19 pandemic that is accompanied by a prolonged period of economic stagnation. 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 2021, Central Credit Management (CCM), which was created by merging the two previously independent units Senior Risk Management – Centralized Credit Underwriting (SRM) and Credit RR & NRR Germany (KCE), has been responsible for the operational management of credit risk for the Commercial Banking and Corporate & Investment Banking (CIB) 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 Market Risk unit is responsible for controlling market risk and the Finance unit within the Chief Financial Officer (CFO) organisation for controlling liquidity risk. The Operational & Reputational Risks unit is responsible for controlling operational risk and reputational risk with the support of the relevant operational risk managers.

Controlling the business risk consists mainly of the planning of earnings and costs by the individual operating segments, which the 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 Market Risk unit, while operational risk and reputational risk are bundled in the Operational & Reputational Risks unit. In addition, the Market 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 Market Risk unit while further risk monitoring functions for this risk type are the responsibility of the Finance 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 (including financial investment risk) and market risk, 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 (credit risk and market 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 all 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 11.75%. 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 section entitled "Risk-weighted assets, key capital ratios, liquidity and leverage ratio of HVB Group" in the Financial Review of this Management's Discussion and Analysis of HVB Group.

The total capital ratio of HVB Group is 21.5% at 30 June 2021 (31 December 2020: 22.5%).

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%)

	30/6/2021		31/12/2020	
Broken down by risk type	**€ millions**	**in %**	**€ millions**	**in %**
Credit risk	3,749	49.1	3,109	45.0
Market risk	1,601	21.0	1,858	26.9
Pension risk	1,198	15.7	851	12.3
Operational risk	473	6.2	472	6.8
Real estate risk	161	2.1	181	2.6
Business risk	231	3.0	239	3.5
Reputational risk	50	0.7	42	0.6
Aggregated economic capital	**7,463**	**97.8**	**6,751**	**97.8**
Model risk cushion	169	2.2	152	2.2
Internal capital of HVB Group	**7,633**	**100.0**	**6,903**	**100.0**
Available financial resources of HVB Group	**17,822**		**17,403**	
Risk-taking capacity of HVB Group, in %		**233.5**		**252.1**

Contains rounding differences.

Internal capital rose by €730 million in comparison to 31 December 2020.

More details on the individual changes within the types of risk can be found in the respective sections on the corresponding types of risk.

Risk Report (Continued)

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

	30/6/2021		31/12/2020	
Broken down by operating segment	€ millions	in %	€ millions	in %
Commercial Banking	1,766	28.2	1,464	24.8
Corporate & Investment Banking	4,273	68.2	4,201	71.2
Other	227	3.6	235	4.0
Consolidation	—	—	—	—
Internal capital (without pension risk and without the model risk cushion) of HVB Group	**6,266**	**100.0**	**5,900**	**100.0**

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 30 September 2020 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 €17,822 million as at 30 June 2021 (31 December 2020: €17,403 million).

With internal capital (including the model risk cushion) of €7,633 million, the risk-taking capacity for HVB Group is 233.5% (31 December 2020: 252.1%). This figure is higher than the target of 160% HVB Group set itself in the 2021 risk appetite framework. The decline of 18.6 percentage points in comparison with 31 December 2020 for HVB Group is attributable to growth of €730 million or 10.6% in internal capital in the first half of 2021. The available financial resources have increased by €420 million or 2.4%. The increase in available financial resources is largely due to a positive development in profit components.

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, operational, business, real estate and reputational risk are currently recorded. In addition, pension risk and 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 2021:
- Pandemic W scenario (from June 2020) – W-shaped recovery from the COVID-19 pandemic
- Pandemic W+ scenario (from June 2020) – W-shaped recovery from the COVID-19 pandemic, an increase in global protectionist tensions and sovereign debt stress in Europe
- Local U-shaped scenario – local severe U-shaped recession (from September 2020) – U-shaped recovery from the COVID-19 pandemic
- Local U-shaped+ scenario – local severe U-shaped recession+ scenario (only in September 2020) – U-shaped recovery from the COVID-19 pandemic with additional turbulence in the German financial system
- Historical scenario (from December 2020) – historical scenario based on the 2009 financial crisis
- Financial Intermediary scenario – a tougher version of the most severe scenario (in June 2020 the W+ scenario, in September 2020 the U+ scenario, from December 2020 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 within the Stress Test Council and any measures required are presented to the Risk Committee and 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, even 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 2021. 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 current COVID-19 pandemic as well as sustainability topics. The outcome of the 2021 risk inventory will be presented to the Risk Committee and HVB's Management Board in September 2021 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, the Risk Committee of the Supervisory Board and the Risk Committee 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 operating segments, 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 2020 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 €3,938 million, which is €637 million higher than the total reported value as at 31 December 2020 (€3,301 million). This change is primarily attributable to changes in models. 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 operating segment 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 €18 million (31 December 2020: €19 million).

Development of metrics by operating segment

Broken down by operating segment	EXPECTED LOSS[1] € millions		RISK DENSITY[2] in BPS		ECONOMIC CAPITAL[3] € millions	
	30/06/2021	31/12/2020	30/06/2021	31/12/2020	30/06/2021	31/12/2020
Commercial Banking	231	202	22	19	1,383	1,136
Corporate & Investment Banking	162	136	10	8	2,554	2,164
Other	—	1	183	371	1	1
Consolidation	—	—	—	—	—	—
HVB Group	**393**	**339**	**15**	**13**	**3,938**	**3,301**

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 2021, the expected loss of HVB Group increased by €54 million and risk density by 2bps.

Both the Commercial Banking operating segment and the CIB operating segment contributed to this development.

In the Commercial Banking operating segment the expected loss rose by €29 million and the risk density by 3bps. This increase is largely attributable to deteriorations in creditworthiness especially in the automotive, chemicals, pharma and healthcare industry groups.

The rise of €26 million in the expected loss in the CIB operating segment and of 2bps in risk density is mainly due to the tourism industry, which was particularly affected by the impact of the COVID-19 pandemic.

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

(€ millions)

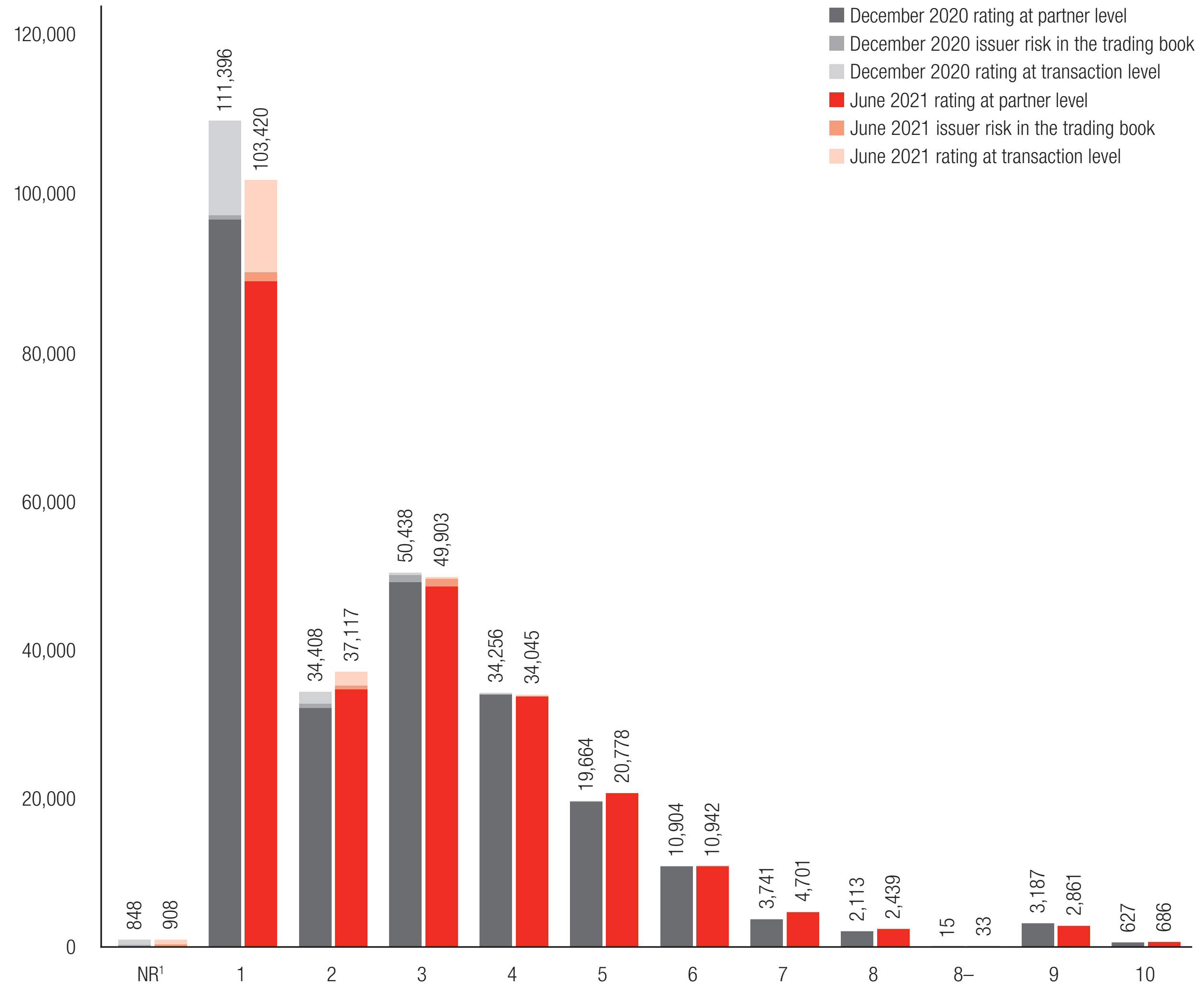
Broken down by operating segment	CREDIT DEFAULT RISK EXPOSURE		OF WHICH COUNTERPARTY RISK		OF WHICH ISSUER RISK IN BANKING BOOK		OF WHICH ISSUER RISK IN TRADING BOOK	
	30/06/2021	31/12/2020	30/06/2021	31/12/2020	30/06/2021	31/12/2020	30/06/2021	31/12/2020
Commercial Banking	106,873	106,263	3,442	3,256	6	6	—	—
Corporate & Investment Banking	160,947	165,320	19,473	20,762	45,109	44,905	3,190	2,305
Other	13	14	—	—	—	—	—	—
Consolidation	—	—	—	—	—	—	—	—
HVB Group	**267,833**	**271,597**	**22,915**	**24,018**	**45,115**	**44,911**	**3,190**	**2,305**

HVB Group's credit default risk exposure fell by €3,764 million in the first half of 2021.

This figure includes a reduction in exposure of €4,373 million in the CIB operating segment. This is due in part to the reduction in liquidity reserves built up at Deutsche Bundesbank. At the same time, the exposure with some large customers, among others in the automotive, public sector (incl. German sovereign, excl. public service companies) as well as transport, travel industry groups.

In the Commercial Banking operating segment, exposure rose slightly by €610 million in several industry groups, including in the agriculture, forestry and in the machinery, metals industry groups.

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



1 Not rated.

The rating structure of HVB Group changed in the course of first half of 2021, primarily as a result of the reduction in exposure of €7,976 million in rating class 1.

The key reasons for this are essentially the reduction in liquidity reserves built up at Deutsche Bundesbank and in exposures with customers, among others in the automotive, public sector (incl. German sovereign, excl. public service companies) and transport, travel industry groups.

Risk Report (Continued)

Development of metrics by industry group

Broken down by industry group	CREDIT DEFAULT RISK EXPOSURE € millions		OF WHICH ISSUER RISK IN TRADING BOOK € millions		EXPECTED LOSS[1] € millions		RISK DENSITY[2] in bps	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Financial institutions (incl. foreign sovereigns)	85,226	84,117	2,298	1,819	26	27	3	3
Real estate	27,513	27,383	72	39	28	28	10	10
Public sector (incl. German sovereign, excl. public services)	22,992	24,425	183	64	—	—	—	—
Special products	15,440	15,482	1	—	5	5	3	3
Energy	12,915	12,841	72	58	15	13	12	10
Machinery, metals	10,712	10,800	27	25	38	34	37	32
Chemicals, pharma, healthcare	10,081	10,812	79	44	40	28	41	26
Automotive	7,416	9,153	29	45	28	15	41	18
Construction, building materials	6,724	6,691	16	5	17	12	25	18
Food, beverages	6,402	7,313	25	20	14	13	22	18
Consumer goods	6,043	5,072	30	8	27	24	46	48
Transport, travel	5,846	6,391	50	34	13	14	23	23
Services	5,537	5,701	57	37	22	20	40	37
Telecommunication, IT	4,709	4,693	56	50	8	6	16	14
Agriculture, forestry	3,273	3,010	1	—	9	8	28	27
Electronics	2,793	3,348	52	16	6	5	23	15
Tourism	2,724	2,896	1	—	36	21	171	92
Media, paper	2,580	2,281	9	4	9	8	37	35
Shipping	1,870	2,062	—	—	7	11	45	61
Textile	1,549	1,654	23	1	5	6	34	43
Public service companies	1,114	1,304	82	11	2	2	18	16
Private customers	24,342	24,124	—	—	38	38	16	16
Others	33	44	27	25	—	1	113	294
HVB Group	**267,833**	**271,597**	**3,190**	**2,305**	**393**	**339**	**15**	**13**

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

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 2021 risk strategy.

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

Financial institutions (including foreign sovereigns)

The exposure in the financial institutions (including foreign sovereigns) industry group rose by €1,109 million as at 30 June 2021 compared with year-end 2020. However, the portfolio's expected loss fell slightly by €1 million. Risk density remained constant.

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 2021 increased slightly by €130 million compared with year-end 2020, whereby the expected loss remained unchanged at a low level (€28 million).

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.

Public sector
(incl. German sovereign, excl. public service companies)

The public sector (including German sovereign) 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 (incl. German sovereign, excl. public service companies) industry group, exposure decreased by €1,433 million in the first half of 2021. 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).

At €42 million, exposure fell slightly in the special products industry group in the first half of 2021 compared with 2020 despite the ongoing COVID-19 pandemic. In this context, the focus remained on customer-related securitisations, which was also in line with the 2021 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. At €5 million or 3bps respectively, the expected loss and the risk density remained stable at a very low level compared with 2020.

Energy

Exposure in the energy industry group increased slightly by €74 million in the first half of 2021.

For new business in the energy industry, we focus on large international companies with strong credit ratings in line with our internal sustainability standards as defined in the risk strategy. Project loans in the area of renewable energy were also in line with the 2021 risk strategy and financing standards, which helped to keep portfolio quality stable overall with an expected loss of €15 million and a risk density of 12bps.

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

(€ millions)

Broken down by eurozone countries	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Germany	175,664	181,352	643	402
France	9,628	9,153	186	235
Italy	9,191	10,023	467	530
Ireland	9,047	8,181	17	16
Spain	7,392	7,443	107	53
Luxembourg	5,714	5,118	71	59
Netherlands	4,181	3,833	53	55
Austria	2,156	1,848	580	264
Belgium	474	512	38	15
Finland	446	293	53	1
Greece	97	116	—	—
Portugal	51	34	6	6
Cyprus	27	54	1	—
Slovenia	14	14	3	2
Estonia	14	16	2	—
Lithuania	11	15	10	13
Slovakia	9	5	6	3
Malta	—	—	—	—
Latvia	—	—	—	—
Supranational organisations and multilateral banks	2,697	2,532	258	71
HVB Group	**226,813**	**230,542**	**2,501**	**1,725**

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.

Development of credit default risk exposure by country/region outside the eurozone (€ millions)

Broken down by country/region outside the eurozone	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
USA	10,392	9,573	175	123
UK	6,010	8,158	38	44
Japan	6,008	5,777	—	—
Switzerland	5,408	4,887	178	107
Asia/Oceania (without Japan, China, Hong Kong)	3,277	2,739	6	1
Western Europe (without Switzerland, UK)	1,990	2,120	19	44
China (including Hong Kong)	1,936	1,962	—	—
Near Middle East	1,301	1,077	—	—
CIS/Central Asia (without Turkey)	1,296	1,214	66	63
Turkey	983	818	—	2
Eastern Europe (without euro countries)	852	882	198	153
Africa	753	810	—	—
North America (including offshore jurisdictions, without USA)	459	556	4	43
Central/South America	355	483	5	—
Without country classification	—	—	—	—
HVB Group	**41,020**	**41,056**	**689**	**580**

In the first half of 2021, the total exposure to customers in countries/regions outside the eurozone fell by €36 million.

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 2021 totalled €83.0 billion (31 December 2020: €99.6 billion). The year-on-year decline of €16.6 billion is primarily attributable to OTC interest rate swaps (down €20.2 billion), cross-currency swaps (down €2.1 billion) and OTC foreign exchange forwards (down €1.1 billion). This is offset by increases of €4.6 billion in equity/index derivatives and €2.1 billion in OTC interest rate options (purchases).

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 risks, HVB Group's derivative business results in risk-weighted assets arising from counterparty risk of €6.4 billion as at 30 June 2021 (31 December 2020: €5.1 billion).

Risk Report (Continued)

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

Derivative transactions

(€ millions)

	NOMINAL AMOUNT					FAIR VALUE			
	RESIDUAL MATURITY			TOTAL		POSITIVE		NEGATIVE	
	UP TO 1 YEAR	MORE THAN 1 YEAR UP TO 5 YEARS	MORE THAN 5 YEARS	30/6/2021	31/12/2020	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Interest rate derivatives	1,869,527	1,898,855	1,893,311	5,661,693	3,923,146	63,807	81,822	58,071	75,765
Foreign exchange derivatives	259,532	42,146	3,966	305,645	248,726	1,941	3,318	1,723	3,006
Cross-currency swaps	43,767	131,151	67,867	242,786	193,333	4,173	6,227	3,260	5,024
Equity/index derivatives	85,404	77,828	17,861	181,094	174,515	11,006	6,448	11,436	5,410
Credit derivatives	1,222	9,504	132	10,858	9,486	145	82	278	290
– Protection buyer	681	5,386	46	6,114	5,804	9	8	271	274
– Protection seller	541	4,118	86	4,745	3,682	136	74	7	16
Other transactions	24,573	14,434	136	39,144	16,424	1,888	1,709	3,140	1,768
HVB Group	**2,284,026**	**2,173,918**	**1,983,275**	**6,441,219**	**4,565,630**	**82,960**	**99,606**	**77,908**	**91,263**

Derivative transactions with a residual maturity of up to three months accounted for a nominal total amount of €744,051 million at 30 June 2021 (of which for credit derivatives: €92 million).

Derivative transactions by counterparty type

(€ millions)

	FAIR VALUE			
	POSITIVE		NEGATIVE	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Central governments and central banks	8,110	11,750	1,192	1,364
Banks	46,838	50,363	47,562	51,357
Financial institutions	24,302	32,588	25,208	34,619
Other companies and private individuals	3,710	4,905	3,946	3,923
HVB Group	**82,960**	**99,606**	**77,908**	**91,263**

2 Market risk

The economic capital for market risk at HVB Group, without taking account of diversification effects between risk types, amounts to €1,727 million (31 December 2020: €1,999 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 CIB operating segment of HVB Group.

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

	MARKET RISK OF POSITIONS RECOGNISED AT FVTPL			MARKET RISK OF POSITIONS RECOGNISED AT FVOCI		
	AVERAGE	PERIOD END		AVERAGE	PERIOD END	
	2021	30/6/2021	31/12/2020	2021	30/6/2021	31/12/2020
Credit spread risk	8.5	3.6	10.3	6.3	3.1	10.9
Interest rate positions	7.9	5.1	6.0	4.8	1.6	7.8
Foreign exchange positions	2.3	2.2	1.8	0.2	0.2	0.2
Equity/index positions[1]	4.8	2.4	6.2	—	—	—
HVB Group[2]	**8.5**	**3.9**	**11.1**	**7.5**	**3.7**	**11.9**

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

The decline in risk in the first half of 2021 is attributable to reduced market volatility as a result of less uncertainty regarding the COVID-19 pandemic.

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 (€ millions)

	30/6/2021	31/3/2021	31/12/2020	30/9/2020	30/6/2020
Value at risk	47	94	92	133	246
Stressed value at risk	198	216	247	251	429
Incremental risk charge	263	256	220	199	139
Market risk standard approach	55	66	60	70	71
CVA value at risk	6	25	34	35	32
Stressed CVA value at risk	35	36	38	39	39
CVA standard approach	60	40	34	34	31

The decline in the regulatory risk metrics value at risk and stressed value at risk in the second quarter of 2021 is mainly due to fewer market fluctuations as a result of less uncertainty regarding the COVID-19 pandemic.

Risk Report (Continued)

Regulatory back-testing of the internal model at HVB for the first half of 2021
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. Three reportable back-testing outliers occurred in in the first half of 2021. 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 2021, there was one instance 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 2021, 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 with (management perspective) and without taking account (regulatory perspective) of the hedge effect from the model book for own funds. In accordance with the European Banking Authority, additional modified model assumptions have been included in the calculation of the sight and savings deposits since the beginning of the year.

Information on interest rate risks in the banking book

	REGULATORY PERSPECTIVE		MANAGEMENT PERSPECTIVE	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Change in present value + 200 basis points in millions	(1,591)	(353)	(314)	(175)
Interest rate coefficient in %	(8.7)	(1.9)	(1.7)	(1.0)

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 significant changes in figures compared with year-end 2020 are due to the decrease in the model components of sight and savings deposits that were not invested due to higher interest rates.

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). The interest rate shocks downwards were updated at the beginning of the year. Assumptions regarding the elasticity of demand 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 11.0%.

Effects of changes in the interest rate on net interest

	30/6/2021		31/12/2020	
	€ millions	in %	€ millions	in %
Parallel upwards	(43)	(1.9)	180	7.3
Parallel downwards	(2)	(0.1)	(31)	(1.3)

The resulting sensitivity analysis was carried out on the basis of the planned net interest for the 2021 financial year. The change in results compared with the previous year can be explained by the changed positions held by the Bank.

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 €56.3 billion at HVB Group for the three-month maturity bucket at the end of June 2021 (30 June 2020: €52.7 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 €8.6 billion at the end of the first half of 2021 (30 June 2020: €23.6 billion).

The calculation of our stress tests includes institution-specific, market-wide and combined scenarios. At the end of the first half of 2021, the calculations showed that the available liquidity reserves cover funding 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 2021 with a value of more than 100%.

Funding risk
The funding risk of HVB Group was again low in the first half of 2021 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 2021, HVB Group had obtained longer-term funding with a volume of €11.2 billion, including another TLTRO III tranche amounting to €5.9 billion (30 June 2020: €32.2 billion, €25.7 billion of which was concluded via the ECB's targeted longer-term refinancing 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 2021 based on CRR II requirements. The internal indicator "adjusted NSFR 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 of HVB's IT services. HVB's Information and Communication Technology (ICT) management processes require continual adjustments to be made to the internal control system (ICS) for IT to allow, among other things, all significant IT risks including cyber risks within the ICT management processes to be monitored and managed appropriately. This also includes the processes in the field of the IT infrastructure which are in turn outsourced by UniCredit Services S.C.p.A. to Value Transformation Services (V-TS, a joint venture of IBM and UniCredit Services S.C.p.A.) for which separate controls were defined in HVB's ICS. In addition, the control system is adjusted as necessary in line with the potential improvements identified at regular intervals and findings from audits.

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 which has persisted since 2020.

Legal risk and compliance risk

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

The Legal, Corporate Affairs & Documentation 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 (only legal disputes), 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 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. The findings of the Supervisory Board's investigation indicated that the Bank sustained losses due to certain past acts/omissions of individuals. The Supervisory Board has brought proceedings for compensation against three individual former members of the Management Board, not seeing reasons to take any action against the current members. In line with the suggestion of the Regional Court of Munich I, the conflicting parties settled the dispute out of court in 2020.

In addition, criminal investigations have been conducted against current or former employees of HVB by the Prosecutors in Frankfurt/Main, Cologne and Munich with the aim of verifying alleged tax evasion offences on their part. HVB cooperated – and continues to cooperate – with the aforesaid Prosecutors who investigated offences that include alleged tax evasion in connection with cum-ex transactions both for HVB's own book as well as for a former customer of HVB. Proceedings in Cologne against HVB and its former employees were closed in November 2015 with, inter alia, the payment of a fine of €9.8 million by HVB. The investigations by the Frankfurt/Main Prosecutor against HVB under section 30 of the Administrative Offences Act (the Ordnungswidrigkeitengesetz) were closed in February 2016 by the payment of a fine of €5 million. The investigation by the Munich Prosecutor against HVB was closed in April 2017 with legally binding effect following the payment of a forfeiture of €5 million.

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 an 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.

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 other transactions in equities around the dividend record date. 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 security transactions around the dividend date. It remains to be clarified whether, and under what circumstances, tax credits can be obtained or taxes refunded with regard to different types of transactions carried out close to the dividend record dates, 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. 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 the parent company UniCredit S.p.A., HVB and UniCredit Bank Austria AG have implemented additional requirements and controls, about which the banks make 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 EUR 69.4 million on the parent company UniCredit S.p.A and HVB. The parent company UniCredit S.p.A. and HVB maintain that the findings do not demonstrate any wrongdoing on the part of the group. They strongly object to the allegations made in the decision and to the imposition of the fine and will challenge the decision by filing an appeal in front of the General Court of the European Union.

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 July 23, 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. Exchange of correspondence concerning motions to dismiss the fourth amended complaint has been completed, and in June 2021 defendants have requested a pre-motion conference with the court.

Adjustment of fee 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 is currently examining the effects of the ruling on its contractual relationships. It has to be assumed that for a part of the contracts adjustments to fee conditions made in the past are to be considered ineffective and that this will result in payment claims by customers.

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 District Court, Southern District of New York 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.

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). In 2019, large parts of the portfolio not used by the Bank were sold. In addition, the sale of the "Am Tucherpark" site constitutes the largest disposal from the portfolio and was realised at the beginning of 2020. Investing in an alternative location for the "Am Tucherpark" site which was sold is planned in the short to medium term. 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 for both the Bank-owned portfolio and the rented properties, under which the requirements of the operating segments and also economic viability are the key factors for decisions, taking into account the assumptions listed.

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, rental contract periods, 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 essentially resulted in the postponement of individual sales activities due to restrictions. It is not yet possible to identify any long-term effects on market values.

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 €316 million at 30 June 2021, which represents a decrease of €29 million (31 December 2020: €345 million). The fully diversified economic capital for real estate risk at HVB Group stands at €161 million (31 December 2020: €181 million).

The risk figures relate to a portfolio valued at €2,725 million.

Breakdown of the real estate portfolio by type

	PORTFOLIO VALUE € millions		SHARE in %	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Real estate used by the Bank	2,233	2,262	81.9	76.4
Real estate not used by the Bank	492	698	18.1	23.6
HVB Group	**2,725**	**2,960**	**100.0**	**100.0**

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 €342 million at 30 June 2021 (31 December 2020: €346 million). The fully diversified economic capital for HVB Group's business risk totals €231 million as at 30 June 2021 (31 December 2020: €239 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 €1,292 million was determined as at 30 June 2021 for the total pension risk of HVB Group (31 December 2020: €915 million). The increase compared with year-end 2020 is primarily due to a significantly higher potential interest rate shock in terms of magnitude on benefit obligations as a result of a rise in the interest rate. 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 cross-risk-type stress tests.

Low interest rates continue to be seen as the main negative factor for both the amount of the pension obligations disclosed and the amount of the income that can be generated from the plan assets with acceptable risk. In the current low interest rate environment, it is quite possible that new historically low levels will be reached and the pension obligations will thus increase.

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.

Risk Report (Continued)

Breakdown of the financial investment portfolio

	PORTFOLIO VALUE € millions		SHARE in %	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Private equity investments	10	10	3.8	4.1
Other investments[1]	243	225	96.2	95.9
HVB Group	**253**	**235**	**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 2020 Annual Report still apply. 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 Reputational Risk Council or rather the Reputational Risk function will obtain a decision on the basis of the risk analysis and the qualitative assessment together with the specialist departments.

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. The process starts with what are known as risk self-assessments by important function owners (risk managers) together with the local operational risk managers. A list of questions is used to carry out the risk self-assessments. Senior management is subsequently interviewed about reputational risk. The senior managers have the opportunity to review the reputational risk identified in their unit during the interview 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. Any reputational risk identified is documented in the Bank's own IT system (as necessary during the year).

The individual business segments and central units are responsible for reputational risk management. Overall responsibility for monitoring rests with the Operational & Reputational Risks area (CRO organisation). The Operational & Reputational Risks area 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 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 events that have 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 level and – based on the ratio of the capital for reputational risk to the capital for the operational risk of UniCredit – distributed between the subsidiaries of UniCredit S.p.A.

The Operational & Reputational Risks area checks the results obtained from calculating the economic capital for the reputational risk of HVB 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.

In the first half of 2021, a new critical/material outsourcing arrangement was agreed in HVB Group by HVB. Due to the post-trade transparency reports to be submitted separately to the UK supervisory authority after Brexit, an outsourcing agreement was concluded with MarketAxess Ltd for services relating to the Approved Publication Arrangement (APA) and Approved Reporting Mechanism (ARM) under MiFID II. This did not result in a significant change in the risk.

Consolidated Income Statement

Consolidated Income Statement

(€ millions)

INCOME/EXPENSE	NOTES	1/1–30/6/2021	1/1–30/6/2020
Interest income[1]		1,523	1,880
Negative interest on financial assets		(176)	(66)
Interest expense		(479)	(681)
Negative interest on financial liabilities		299	158
Net interest	8	1,167	1,291
Dividends and other income from equity investments	9	16	6
Net fees and commissions	10	581	526
Net trading income	11	423	258
Net gains/(losses) on financial assets and liabilities at fair value	12	44	(206)
Net gains/(losses) on derecognition of financial instruments measured at cost	13	(1)	2
Net other expenses/income	14	(116)	504
Payroll costs		(733)	(725)
Other administrative expenses		(641)	(620)
Amortisation, depreciation and impairment losses on intangible and tangible assets		(58)	(62)
Operating costs	15	(1,432)	(1,407)
Credit impairment losses IFRS 9	16	34	(467)
Provisions for risks and charges	17	(88)	8
Restructuring costs		—	(19)
Net gains/(losses) on disposals of investments	18	(11)	—
PROFIT/(LOSS) BEFORE TAX		**617**	**496**
Income tax for the period		(259)	(167)
PROFIT/(LOSS) AFTER TAX (CONSOLIDATED PROFIT/(LOSS))		**358**	**329**
attributable to the shareholder of UniCredit Bank AG		358	329
attributable to minorities		—	—

1 The item "Interest income" contains interest of €1,098 million calculated using the effective interest method (previous-year period: €1,327 million). The figure is based on classification according to IFRS 9.

Earnings per share

(in €)

	NOTES	1/1–30/6/2021	1/1–30/6/2020
Earnings per share (undiluted and diluted)	19	0.45	0.41

Consolidated Statement of Total Comprehensive Income

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Profit/(loss) after tax recognised in the income statement (consolidated profit/(loss))	**358**	**329**
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)	314	38
Allocation to/withdrawal from the revaluation surplus for owner-occupied property (IAS 16)	5	(1)
Change in the fair value of financial liabilities at FVTPL attributable to changes in the default risk (own credit spread reserve)	(30)	59
Other changes	—	—
Taxes on income and expenses not to be reclassified to the income statement in future periods	(90)	(31)
Income and expenses to be reclassified to the income statement in future periods		
Changes from foreign currency translation	2	—
Changes in the measurement of financial instruments (hedge reserve)	(1)	(12)
Unrealised gains/(losses)	(1)	(12)
Gains/(losses) reclassified to the income statement	—	—
Changes in the measurement of financial instruments at FVTOCI (FVTOCI reserve)	3	(47)
Unrealised gains/(losses)	4	(35)
Gains/(losses) reclassified to the income statement	(1)	(12)
Other changes	(2)	(4)
Taxes on income and expenses to be reclassified to the income statement in future periods	(1)	18
Total income and expenses recognised in equity through other comprehensive income	**200**	**20**
Total comprehensive income	**558**	**349**
of which:		
attributable to the shareholder of UniCredit Bank AG	558	349
attributable to minorities	—	—

Consolidated Balance Sheet

(€ millions)

ASSETS	NOTES	30/6/2021	31/12/2020
Cash and cash balances		47,533	47,531
Financial assets held for trading	20	85,608	82,705
Financial assets at FVTPL	21	9,771	11,444
Financial assets at FVTOCI	22	12,872	12,471
Loans and receivables with banks (at cost)	23	29,848	33,973
Loans and receivables with customers (at cost)	24	143,031	144,247
Hedging derivatives	25	240	372
Hedge adjustment of hedged items in the portfolio fair value hedge		33	70
Investments in associates and joint ventures accounted for using the equity method	26	12	11
Property, plant and equipment	27	2,487	2,525
Investment properties	28	355	352
Intangible assets	29	9	8
Tax assets		827	1,031
Current tax assets		69	88
Deferred tax assets		758	943
Non-current assets or disposal groups held for sale	30	609	778
Other assets	31	856	606
TOTAL ASSETS		**334,091**	**338,124**

(€ millions)

LIABILITIES	NOTES	30/6/2021	31/12/2020
Deposits from banks	32	78,403	73,507
Deposits from customers	33	136,980	143,803
Debt securities in issue	34	32,240	31,743
Financial liabilities held for trading	35	55,647	56,951
Financial liabilities at FVTPL	36	5,726	5,736
Hedging derivatives	37	552	734
Hedge adjustment of hedged items in the portfolio fair value hedge	38	1,305	1,941
Tax liabilities		886	1,173
Current tax liabilities		437	737
Deferred tax liabilities		449	436
Liabilities of disposal groups held for sale	39	553	631
Other liabilities		1,169	1,207
Provisions	40	2,597	2,823
Shareholders' equity		18,033	17,875
Shareholders' equity attributable to the shareholder of UniCredit Bank AG		16,343	16,185
Subscribed capital		2,407	2,407
Additional paid-in capital		9,791	9,791
Other reserves		3,727	3,528
Currency reserves		11	9
Changes in valuation of financial instruments		49	50
Hedge reserve		18	21
FVTOCI reserve		31	29
Profit available for distribution 2020		—	400
Consolidated profit/(loss) 1/1–30/6/2021[1]		358	—
Additional Tier 1 capital		1,700	1,700
Minority interests		(10)	(10)
TOTAL LIABILITIES		**334,091**	**338,124**

1 Attributable to the shareholder of UniCredit Bank AG.

The 2020 profit available for distribution disclosed in the annual financial statements of HVB, which forms the basis for the appropriation of profit, amounts to €400 million. This consists of HVB's net income of €533 million generated in 2020 less the transfer of 133 million to other retained earnings. On 7 June 2021, the Shareholders' Meeting of HVB adopted a resolution to pay a dividend of €400 million to UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €0.50 per share after around €4.10 for the 2019 financial year. According to a resolution adopted by the Shareholders' Meeting on 7 June 2021, the 2020 profit available for distribution was distributed on 30 June 2021.

Statement of Changes in Shareholders' Equity

	SUBSCRIBED CAPITAL	ADDITIONAL PAID-IN CAPITAL	OTHER RESERVES: TOTAL OTHER RESERVES	OF WHICH: OWN CREDIT SPREAD	OF WHICH: REVALUATION RESERVE FOR OWN PROPERTIES	OF WHICH: PENSIONS AND SIMILAR OBLIGATIONS (IAS 19)
Shareholders' equity at 1/1/2021	**2,407**	**9,791**	**3,528**	**(24)**	**892**	**(1,964)**
Consolidated profit 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 the measurement of financial instruments	—	—	(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 Tier 1 instruments	—	—	—	—	—	—
Transfers to/withdrawals from consolidated profit available for distribution	—	—	—	—	—	—
Changes in group of consolidated companies	—	—	—	—	(2)	3
Capital decreases	—	—	—	—	—	—
Shareholders' equity at 30/6/2021	**2,407**	**9,791**	**3,727**	**(44)**	**889**	**(1,747)**
Shareholders' equity at 1/1/2020	**2,407**	**9,791**	**3,379**	**(13)**	**852**	**(1,658)**
Consolidated profit recognised in the consolidated income statement	**—**	**—**	**—**	**—**	**—**	**—**
Total income and expenses recognised in equity through other comprehensive income[4]	**—**	**—**	**64**	**40**	**(1)**	**26**
Unrealised gains/(losses) due to changes in the measurement of financial instruments	—	—	39	40	(1)	—
Gains/(losses) reclassified to the income statement	—	—	—	—	—	—
Actuarial gains/(losses) on defined benefit plans	—	—	26	—	—	26
Changes from foreign currency translation	—	—	—	—	—	—
Other changes	—	—	(1)	—	—	—
Total other changes in equity	**—**	**—**	**—**	**—**	**(5)**	**—**
Capital increase	—	—	—	—	—	—
Reclassification from equity reserves to retained earnings	—	—	—	—	(5)	—
Dividend payouts	—	—	—	—	—	—
Payouts on additional Tier 1 instruments	—	—	—	—	—	—
Transfers to/withdrawals from consolidated profit available for distribution	—	—	—	—	—	—
Changes in group of consolidated companies	—	—	—	—	—	—
Capital decreases	—	—	—	—	—	—
Shareholders' equity at 30/6/2020	**2,407**	**9,791**	**3,443**	**27**	**846**	**(1,632)**

1 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.
The Shareholders' Meeting of 23 June 2020 resolved to distribute the 2019 profit available for distribution in the amount of €3,288 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €4.10 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)

CURRENCY RESERVE	CHANGE IN MEASUREMENT OF FINANCIAL INSTRUMENTS HEDGE RESERVE	FVTOCI RESERVE	PROFIT AVAILABLE FOR DISTRIBUTION[1]	CONSOLIDATED PROFIT 1/1–30/6[2]	TOTAL SHAREHOLDERS' EQUITY ATTRIBUTABLE TO THE SHAREHOLDER OF HVB[3]	ADDITIONAL TIER 1 INSTRUMENTS	MINORITY INTEREST	TOTAL SHAREHOLDERS' EQUITY
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)	—	—	—	(2)	—	—	(2)
—	**—**	**—**	**(400)**	**—**	**(400)**	**—**	**—**	**(400)**
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	(400)	—	(400)	—	—	(400)
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
11	**18**	**31**	**—**	**358**	**16,343**	**1,700**	**(10)**	**18,033**
17	**28**	**15**	**3,288**	**—**	**18,925**	**—**	**(10)**	**18,915**
—	**—**	**—**	**—**	**329**	**329**	**—**	**—**	**329**
—	**(13)**	**(32)**	**—**	**—**	**19**	**—**	**—**	**19**
—	(10)	(24)	—	—	5	—	—	5
—	—	(8)	—	—	(8)	—	—	(8)
—	—	—	—	—	26	—	—	26
—	—	—	—	—	—	—	—	—
—	(3)	—	—	—	(4)	—	—	(4)
—	**—**	**—**	**(3,288)**	**—**	**(3,288)**	**—**	**2**	**(3,286)**
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	(3,288)	—	(3,288)	—	—	(3,288)
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	2	2
—	—	—	—	—	—	—	—	—
17	**15**	**(17)**	**—**	**329**	**15,985**	**—**	**(8)**	**15,977**

Consolidated Cash Flow Statement (abridged version)

(€ millions)

	2021	2020
Cash and cash equivalents at 1/1	47,531	26,215
Cash flows from operating activities	254	(4,915)
Cash flows from investing activities	(34)	(101)
Cash flows from financing activities	(218)	(3,257)
Effects of exchange rate changes	—	—
Less non-current assets or disposal groups held for sale	—	—
Cash and cash equivalents at 30/6	47,533	17,942

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 avail ourselves of the possibility of reviewing the present Half-yearly Financial Report of HVB Group compliant with 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.

The amounts shown in the tables and texts below relate to the period from 1 January to 30 June of the respective year for disclosures regarding the income statement and to the reporting date of 30 June 2021 for disclosures regarding balance sheet items and totals, or to 31 December 2020 for disclosures regarding the previous year.

Accounting and Valuation

1 Accounting and valuation principles

The present Half-yearly Financial Report for HVB Group has been prepared in accordance with the regulations 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.

IFRS to be applied for the first time in the financial year

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 2021 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 2021 financial year:

- Amendments to IFRS 4 “Insurance Contracts” – Extension of the temporary exemption from the application of IFRS 9 “Financial Instruments” (issued on 25 June 2020/adopted into European law on 15 December 2020).
- Amendments to IFRS 9 “Financial Instruments”, IAS 39 “Financial Instruments: Recognition and Measurement”, IFRS 7 “Financial Instruments: Disclosures”, IFRS 4 “Insurance Contracts” and IFRS 16 “Leases” – Interest Rate Benchmark Reform (Phase 2) (issued on 27 August 2020/adopted into European law on 13 January 2021).

IBOR Reform (Phase 2)

With effect from 1 January 2021 HVB Group implemented the amendments to IFRS 9 “Financial Instruments”, IAS 39 “Financial Instruments: Recognition and Measurement”, IFRS 7 “Financial Instruments: Disclosures”, IFRS 4 “Insurance Contracts” and IFRS 16 “Leases” – Interest Rate Benchmark Reform (Phase 2). The amendments addressed here relate to the replacement of interest rate benchmarks and are concerned with the impact they have on financial reporting. In HVB Group, they only affect financial instruments.

Provided the conditions of IFRS 9.5.4.5 ff. are met, the replacement of interest rate benchmarks in the course of the IBOR reform can be reflected by adjusting the effective interest rate. If, in exceptional cases, this does not apply, the adjustments are reflected in line with the requirements of IFRS 9 to modify the contracts for financial instruments.

Libor interest rates are affected by the conversion as a result of the IBOR reform. Euribor interest rates are considered to conform to the new benchmark requirements and continue to be offered so it is currently not necessary to convert Euribor interest rates. Libor interest rates for existing derivative contracts will be converted as part of a fallback solution developed by the ISDA Association. Most of the derivative business will undergo this conversion at the turn of the year 2021/22. Appropriate rules for this will be laid down by the relevant ISDA protocol and by adjusting German framework agreements in conjunction with the ISDA fallback rate. Further interest rate alternatives for the pricing of new business are currently being published by private-sector providers; a final market standard has not yet become established. Bilateral agreements are required for loans and securities with Libor interest rates.

Clearing houses already began to convert EONIA interest rates to €STR interest rates in 2020. The differences between the interest rate curves are offset by a spread or a compensation payment. The bilateral adjustment of contracts required for this is being continued. This primarily affects the requirements for fair value measurement of derivatives and determination of the cash collateral under netting arrangements. In the first half of 2021, HVB Group had already concluded new derivatives at €STR rates.

The implementation of Phase 2 of the IBOR reform has not yet had any material impact on financial reporting, nor is a material impact expected from the planned replacement of the interest rate benchmarks.

Amendments to other accounting rules
We have also taken account of amendments to other accounting rules. These have had no effect on the consolidated financial statements.

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 2020 Annual Report.

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 by HVB Group for the 2022 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:
– Amendments to IFRS 3 "Business Combinations" – Reference to the Conceptual Framework (issued on 14 May 2020/adopted into European law on 28 June 2021). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2022.
– 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). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2022.
– 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). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2022.
– 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). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2022.

The EU has not yet adopted the following into European law:
– IFRS 17 "Insurance Contracts" (issued on 18 May 2017) including the amendments to IFRS 17 (issued on 25 June 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 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 1 "Presentation of Financial Statements" and to the IFRS Practice Statement 2 – Disclosures of Accounting Policies (issued on 12 February 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 8 "Accounting Policies, Changes in Accounting Estimates and Errors" – Definition of Accounting Estimates (issued on 12 February 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 16 "Leases" – COVID-19-Related Rent Concessions after 30 June 2021 (issued on 31 March 2021). The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 April 2021.
– 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.

We do not expect the remaining new or amended rules to be adopted in the future to have any significant effects on the consolidated financial statements.

Accounting and Valuation (Continued)

2 Companies included in consolidation

The following companies were added to the group of companies included in consolidation in the first half of 2021:

– 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 2021 due to imminent or completed liquidation or loss of control:

– Elektra Purchase No. 41 DAC, Dublin
– Elektra Purchase No. 718 DAC, Dublin
– Wealthcap Objekt Essen II GmbH & Co. KG, Munich
– Wealthcap Objekt Mainz GmbH & Co. KG, Munich

The following companies left the group of companies included in consolidation in the first half of 2021 for reasons of materiality:

– A&T-Projektentwicklungs GmbH & Co. Potsdamer Platz Berlin KG, Munich
– Acis Immobilien- und Projektentwicklungs GmbH & Co. Parkkolonnaden KG, Grünwald
– Atlanterra Immobilienverwaltungs GmbH, Munich
– BIL Leasing-Fonds GmbH & Co VELUM KG, Grünwald
– Buitengaats Holding B.V., Eemshaven
– Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Alpha Management KG, Munich
– Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Gamma Management KG, Munich
– Food & more GmbH, Munich
– Grundstücksaktiengesellschaft am Potsdamer Platz (Haus Vaterland), Munich
– HVB Hong Kong Limited, Hong Kong
– HVB Secur GmbH, Munich
– Interra Gesellschaft für Immobilienverwaltung mbH, Munich
– Othmarschen Park Hamburg GmbH & Co. Centerpark KG, Munich
– Selfoss Beteiligungsgesellschaft mbH, Grünwald
– Simon Verwaltungs-Aktiengesellschaft i.L., Munich
– Spree Galerie Hotelbetriebsgesellschaft mbH, Munich
– Verwaltungsgesellschaft Katharinenhof mbH, 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 0.01% as at 31 December 2020.

Segment Reporting

3 Changes in segment reporting

At the beginning of 2021, the internal management of HVB Group was aligned 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. The now uniform management concepts increase the transparency of the HVB subgroup's financial statements, as the information provided in HVB Group's segment reporting is now compatible with the information that UniCredit communicates to the capital market.

The Group Corporate Centre is therefore being integrated into the Commercial Banking operating segment so that the Commercial Banking operating segment of HVB Group will in future correspond to the subarea Commercial Banking Germany reported by UniCredit. HVB Group is thus divided into the following operating segments:
– Commercial Banking
– Corporate & Investment Banking
– Other

The adjustment also involves further changes in recognition and measurement in addition to the consolidation of the operating segments. For internal management purposes, certain income and expenses are recognised or allocated differently to the way this occurs in external financial reporting. Among other items, imputed equity costs are taken into account to economically represent the capital backing. Any external equity required in this connection is procured centrally through UniCredit. Moreover, certain income and expenses are allocated to other items in the income statement for internal management purposes, which means that recognition differs to that in the external financial reports. For example, the scope of net trading income is wider and includes further income and expenses. The general rule applies that UniCredit's perspective is authoritative for internal management. Consequently, effects are included that resulted from the initial consolidation of HVB Group by UniCredit in the course of the purchase price allocation (PPA) but which may not be taken into account in the financial statements of HVB Group. These differences are dealt with in greater detail below when comparing the previous structure of the income statements with the new structure valid as of 1 January 2021, whereby significant items are allocated to the operating segments concerned. Due to rounding, minor deviations can occur when calculating totals and percentages.

Segment Reporting (Continued)

Comparison of previous management system with new management system from 1 January to 30 June 2021 (€ millions)

INCOME/EXPENSES	SEGMENTED INCOME STATEMENT (OLD SYSTEM)	SEGMENTED INCOME STATEMENT (NEW SYSTEM)	DIFFERENCE
Net interest	1,167	1,161	(6)
Dividends and other income from equity investments	16	10	(6)
Net fees and commissions	581	560	(21)
Net trading income	467	476	9
Net other expenses/income	(139)	41	180
OPERATING INCOME	**2,092**	**2,248**	**156**
Payroll costs	(733)	(727)	6
Other administrative expenses	(638)	(593)	45
Amortisation, depreciation and impairment losses on intangible and tangible assets	(58)	(54)	4
Operating costs	**(1,429)**	**(1,374)**	**55**
OPERATING PROFIT/(LOSS)	**663**	**875**	**212**
Net write-downs of loans and provisions for guarantees and commitments	34	29	(5)
NET OPERATING PROFIT/(LOSS)	**697**	**904**	**207**
Provisions for risks and charges	(88)	(312)	(224)
Restructuring costs	—	(1)	(1)
Net income from investments	8	11	3
PROFIT/(LOSS) BEFORE TAX	**617**	**602**	**(15)**
Income tax for the period	(259)	(256)	3
PROFIT/(LOSS) AFTER TAX	**358**	**346**	**(12)**
Purchase price allocation effect	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**358**	**346**	**(12)**
attributable to the shareholder of UniCredit Bank AG	358	346	(12)
attributable to minorities	—	—	—

Net interest
The difference in net interest is minus €6 million with minus €8 million attributable to imputed costs of equity charged to HVB Group's operating segments by UniCredit, minus €1 million to a reallocation of net interest income/interest expense from specific trading positions to net trading income, €2 million to the change in recognition for the compounding of provisions now shown as provisions for risks and charges, and €1 million for the compounding of provisions for contingent liabilities now reported under net write-downs of loans and provisions for guarantees and commitments.

Dividends and other income from equity investments
Dividend income of €5 million from equity holdings at fair value through profit or loss reported according the old management system under this item in the first half of 2021 is now recognised under net trading income.

Net fees and commissions
The difference in net fees and commissions totals minus €21 million as the expense for purchased securities services for held-for-trading portfolios is now shown as commission expense and no longer as operating costs.

The decline of €21 million relating to the reallocation of the expense for purchased securities services for held-for-trading portfolios is mainly attributable to the Corporate & Investment Banking operating segment.

Net trading income
The difference in net trading income is €9 million, €5 million of which relates to dividends of equity holdings at fair value through profit or loss, €2 million to the reallocation of gains on the disposal of performing financial instruments at cost to net trading income, €1 million to a reallocation from net interest and €1 million to the reallocation of the gain on the disposal of financial instruments measured at fair value through other comprehensive income.

Net other expenses/income
The difference in the item "net other expenses/income" comes to €180 million, in which connection an increase of €193 million is attributable to the bank levy, which is now shown under provisions for risks and charges and no longer as other expenses, a decline of €9 million to income for services provided by a HVB Group subsidiary to the Bank Austria subgroup, which is not allocated to HVB Group from UniCredit's perspective, a decline of €2 million to the reallocation of the gains on the disposal of performing financial instruments at cost to net trading income, and a decline of €2 million due to other effects.

Of the increase of €193 million relating to the reallocation of the bank levy, €73 million is attributable to the Commercial Banking operating segment and €120 million to the Corporate & Investment Banking operating segment.

Payroll costs
The difference in payroll costs is €6 million, as services provided by a HVB Group subsidiary to the Bank Austria subgroup are not allocated to HVB Group from UniCredit's perspective. The payroll costs related to these are thus not allocated to HVB Group.

Other administrative expenses
The difference in other administrative expenses comes to €45 million as the contribution to the German deposit guarantee scheme of €30 million is now reported under provisions for risks and charges, the expense for purchased securities services for held-for-trading portfolios of €21 million is now shown as a commission expense, and on account of further expenses of €2 million, which were incurred for the provision of services by a HVB Group subsidiary to the Bank Austria subgroup and are thus not allocated to HVB Group from UniCredit's perspective. In contrast, expenses increased as depreciation on leasehold improvements of €4 million are recognised under this item instead of as previously under amortisation, depreciation and impairment losses on intangible and tangible assets and as a result of higher expenses of €3 million due to other effects.

The increase of €21 million relating to the reallocation of the expense for purchased securities services for held-for-trading portfolios is largely attributable to the Corporate & Investment Banking operating segment, while €22 million of the €30 million increase relating to the reallocation of the contribution to the German deposit guarantee scheme is attributable to the Commercial Banking operating segment and €8 million to the Corporate & Investment Banking operating segment.

Segment Reporting (Continued)

Amortisation, depreciation and impairment losses on intangible and tangible assets
Amortisation, depreciation and impairment losses on intangible and tangible assets is €4 million lower because the depreciation on leasehold improvements is no longer recognised under this item.

Net write-downs of loans and provisions for guarantees and commitments
The difference in the net income from net write-downs of loans and provisions for guarantees and commitments amounts to minus €5 million as write-downs on securities of €5 million are now shown under net income from investments and the compounding of provisions for contingent liabilities of €1 million is no longer contained in this item. In contrast, an amount of €1 million in write-downs on securities measured at cost or at fair value through other comprehensive income are now recognised under net income from investments.

Provisions for risks and charges
The difference in provisions for risks and charges amounts to minus €224 million, minus €223 million of which relates to reallocations to this item of the expenses for the bank levy and the German deposit guarantee scheme and minus €2 million to the change in recognition for the compounding of provisions that are now recognised under this item.

Of the decline of €223 million relating to the reallocation of expenses for the bank levy and the German deposit guarantee scheme, €95 million is attributable to the Commercial Banking operating segment and €128 million to the Corporate & Investment Banking operating segment.

Net income from investments
The difference in net income from investments amounts to €3 million, of which an increase of €5 million relates write-downs on securities and an increase of €5 million to other effects. This was offset by the reallocation of write-downs on securities of €1 million from net write-downs on loans and provisions on guarantees and commitments and the reallocation of the gain on the disposal of the financial instruments at fair value through other comprehensive income of €1 million to net trading income and expenses of €5 million from the deconsolidation of two companies.

Income tax for the period
The difference in income tax for the period is €3 million as tax effects on the adjustments of the measurements and other reconciliation effects are recognised under this item.

Consolidated profit/loss
In total, the difference in consolidated profit is minus €12 million, of which minus €5 million relates to the deconsolidation of two companies and minus €5 million (minus €8 million before tax plus €3 million tax income) to imputed costs of equity charged by UniCredit to HVB Group’s operating segments.

Comparison of previous management system with new management system from 1 January to 30 June 2020 (€ millions)

INCOME/EXPENSES	SEGMENTED INCOME STATEMENT (OLD SYSTEM)	SEGMENTED INCOME STATEMENT (NEW SYSTEM)	DIFFERENCE
Net interest	1,291	1,249	(42)
Dividends and other income from equity investments	6	—	(6)
Net fees and commissions	526	504	(22)
Net trading income	40	78	38
Net other expenses/income	(43)	71	114
OPERATING INCOME	**1,820**	**1,903**	**83**
Payroll costs	(725)	(721)	4
Other administrative expenses	(620)	(586)	34
Amortisation, depreciation and impairment losses on intangible and tangible assets	(62)	(57)	5
Operating costs	**(1,407)**	**(1,365)**	**42**
OPERATING PROFIT/(LOSS)	**413**	**538**	**125**
Net write-downs of loans and provisions for guarantees and commitments	(467)	(465)	2
NET OPERATING PROFIT/(LOSS)	**(54)**	**73**	**127**
Provisions for risks and charges	8	(164)	(172)
Restructuring costs	(19)	(19)	—
Net income from investments	561	551	(10)
PROFIT/(LOSS) BEFORE TAX	**496**	**442**	**(54)**
Income tax for the period	(167)	(157)	10
PROFIT/(LOSS) AFTER TAX	**329**	**285**	**(44)**
Purchase price allocation effect	—	(49)	(49)
CONSOLIDATED PROFIT/(LOSS)	**329**	**235**	**(94)**
attributable to the shareholder of UniCredit Bank AG	329	235	(94)
attributable to minorities	—	—	—

Net interest

The difference in net interest is minus €42 million. Of this amount minus €26 million relate to imputed costs of equity charged to HVB Group's operating segments by UniCredit, minus €17 million to a reallocation of net interest income/interest expense from specific trading positions to net trading income and €1 million to the change in recognition for the compounding of provisions that are now shown as provisions for risks and charges.

Of the difference of minus €26 million relating to the imputed cost of equity charged by UniCredit, minus €10 million is attributable to the Commercial Banking operating segment and minus €16 million to the Corporate & Investment Banking operating segment, whereas the decline of €17 million relating to the reallocation of net interest income/interest expense from specific trading positions is largely attributable to the Corporate & Investment Banking operating segment.

Dividends and other income from equity investments

Dividend income of €6 million from equity holdings at fair value through profit or loss reported previously under this item in the first half of 2020 is now reported under net trading income.

Segment Reporting (Continued)

Net fees and commissions
The difference in net fees and commissions totals minus €22 million as the expense for purchased securities services for held-for-trading portfolios is now shown as commission expense and no longer as operating costs.

The decline of €22 million relating to the reallocation of the expense for purchased securities services for held-for-trading portfolios is mainly attributable to the Corporate & Investment Banking operating segment.

Net trading income
The difference in net trading income is €38 million, €17 million of which relate to a reallocation from net interest, €12 million to a reallocation of the gain on the disposal of financial instruments measured at fair value through other comprehensive income, €6 million to dividends on equity holdings measured at fair value through profit or loss and €3 million to the reallocation to net trading income of gains on the disposal of performing financial instruments measured at cost.

The increase of €17 million relating to the reallocation from net interest is primarily attributable to the Corporate & Investment Banking operating segment.

Net other expenses/income
The difference in the item "net other expenses/income" comes to €114 million, in which connection an increase of €126 million is attributable to the bank levy, which is now shown under provisions for risks and charges and no longer under this item as other expenses, a decline of €8 million to income for services provided by a HVB Group subsidiary to the Bank Austria subgroup, which is not allocated to HVB Group from UniCredit's perspective, a decline of €3 million to the reallocation of the gains on the disposal of performing financial instruments measured at cost to net trading income, and a decline of €1 million due to other effects.

Of the increase of €126 million relating to the reallocation of the bank levy, €44 million is attributable to the Commercial Banking operating segment and €82 million to the Corporate & Investment Banking operating segment.

Payroll costs
The difference in payroll costs is €4 million, as services provided by a HVB Group subsidiary to the Bank Austria subgroup are not allocated to HVB Group from UniCredit's perspective. The payroll costs related to these are thus not allocated to HVB Group.

Other administrative expenses
The difference in other administrative expenses comes to €34 million as the expense for purchased securities services for held-for-trading portfolios of €22 million is now shown as a commission expense, the contribution to the German deposit guarantee scheme of €15 million is now reported under provisions for risks and charges and on account of further expenses of €1 million that were incurred for the provision of services by a HVB Group subsidiary to the Bank Austria subgroup and thus are not allocated to HVB Group from UniCredit's perspective and as a result of a decline in expenses of €1 million due to other effects. In contrast, expenses increased as depreciation on leasehold improvements of €5 million are recognised under this item instead of as previously under amortisation, depreciation and impairment losses on intangible and tangible assets.

The increase of €22 million relating to the reallocation of the expense for purchased securities services for held-for-trading portfolios is largely attributable to the Corporate & Investment Banking operating segment, while €11 million of the €15 million increase relating to the reallocation of the contribution to the German deposit guarantee scheme is attributable to the Commercial Banking operating segment and €4 million to the Corporate & Investment Banking operating segment.

Amortisation, depreciation and impairment losses on intangible and tangible assets
Amortisation, depreciation and impairment losses on intangible and tangible assets is €5 million lower because the depreciation on leasehold improvements is no longer recognised under this item.

Net write-downs of loans and provisions for guarantees and commitments
The difference in the net expense for net write-downs of loans and provisions for guarantees and commitments amounts to €2 million as write-downs on securities holdings measured at cost or at fair value through other comprehensive income are now recognised under net income from investments.

Provisions for risks and charges
The difference in provisions for risks and charges amounts to minus €172 million, minus €141 million of which relates to reallocations to this item of the expenses for the bank levy and the German deposit guarantee scheme, another minus €30 million to the recognition as an expense of the irrevocable payment commitments given for both items by the Group and minus €1 million to the change in recognition for the compounding of provisions that are now recognised under this item.

Of the decline of €141 million relating to the reallocation of expenses for the bank levy and the German deposit guarantee scheme, €55 million is attributable to the Commercial Banking operating segment and €86 million to the Corporate & Investment Banking operating segment; the recognition as an expense of the irrevocable payment commitments given for these two items totals €30 million, €14 million of which is allocated to the Commercial Banking operating segment and €16 million to the Corporate & Investment Banking operating segment.

Net income from investments
The difference in net income from investments amounts to minus €10 million, of which a decline of €12 million relates to the reallocation of the gain on disposal of financial instruments measured at fair value through other comprehensive income to net trading income and a decline of €2 million to the reallocation of net write-downs of loans and provisions for guarantees and commitments to securities. This is offset by a different effect of €4 million: Net income from investments includes the gain on the sale of the "Am Tucherpark" site, which had to be adjusted on account of the partial lease-back of spaces under a sale-and-lease-back transaction. On account of purchase price accounting effects (for more detailed explanations, see the item "purchase price allocation effect") the reduction of the gain on the sale is lower for the leased-back part due to the sale-and-lease-back transaction and is thus to be adjusted from UniCredit's perspective.

Income tax for the period
The difference in income tax for the period is €10 million as tax effects on the adjustments of the measurements and other reconciliation effects are recognised under this item.

Purchase price allocation effect
The new line for the effects of purchase price accounting includes effects attributable to the valuation adjustments made during the first-time consolidation of HVB Group by UniCredit. These have generally been amortised over time for the most part since HVB Group was purchased by UniCredit, which means that only specific individual items are left remaining. For the first half of 2020, the effects after tax are reported that resulted from the different measurement approach for the "Am Tucherpark" site sold in 2020. Due to the fair value measurement required by IFRS 3 on purchasing the real estate as a part of HVB Group, UniCredit's purchase costs for this real estate portfolio are higher and the gain realised on the sale is thus lower. Consequently, the line for effects of purchase price accounting contains an adjustment item of minus €49 million after tax in order to adjust the gain on the sale of the real estate portfolio realised by HVB Group under net income from investments to UniCredit's lower level.

An adjustment item in the amount of minus €49 million is allocated to the Other operating segment to reflect effects from purchase price accounting.

Segment Reporting (Continued)

Consolidated profit/loss
In total, the difference in consolidated profit is minus €94 million, of which minus €49 million relates to the effects described above from purchase price accounting, minus €28 million (minus €30 million before tax plus €2 million tax income) to the recognition as an expense of irrevocable payment commitments and minus €17 million (minus €26 million before tax plus €9 million tax income) to imputed costs of equity charged by UniCredit to HVB Group's operating segments.

Comparison of volume figures according to the old management system and the new management system
According to the new management system, loans and receivables with banks (at cost) at 31 December 2020 are €13 billion higher than in the old system for the Corporate & Investment Banking operating segment. The difference is fully attributable to a part of the deposits with the European Central Bank that was previously reported in full as cash and cash balances and according to the new management system partly as a receivable with banks in line with the requirements of the Bank of Italy.

When stating the risk-weighted assets according to Basel III (including equivalents for market risk and operational risk) by operating segment, the adjustment made is based on UniCredit's perspective: risk-weighted assets relating to UniCredit-internal matters are not recognised. Therefore, the risk-weighted assets to be shown are €2 billion lower in total as both risk-weighted assets used to back UniCredit-internal transactions and group-internal risk positions for market risk and operational risk are not included. The effects are distributed in roughly equal parts between the Commercial Banking and the Corporate & Investment Banking operating segments.

4 Method of segment reporting by operating segment
In segment reporting, the activities of HVB Group are divided into the following operating segments:
– Commercial Banking
– Corporate & Investment Banking
– Other

Segment reporting is based on the internal organisational and management structure together with internal financial reporting. 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 of net fees and commissions, net trading profit 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 on 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 12.00% (previous year: 12.25%) 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 plus a premium in the amount of the average spread curve for the medium and long-term lending business of HVB Group. This rate is set for one year in advance as part of each budgeting process. The percentage changed to 0.92% in financial year 2021 after 0.91% in the previous financial year. Equity capital is not standardised for the other companies included in the consolidated financial statements.

Operating costs, which contain 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 Other operating segment and the Group Corporate Centre business unit (a part of the Commercial Banking operating segment) 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 operating segment.

The profit of €10 million (previous year: €0 million) from shares in associates relates to Comtrade Group B.V., Rotterdam, a company accounted for using the equity method, which generated a gain on the disposal of a business division in the reporting period. The company is assigned to the CIB operating segment. The profit is disclosed under the item “Dividends and other income from equity investments” in the income statement. The carrying amount of the company accounted for using the equity method is €12 million (previous year: €11 million).

5 Components of segment reporting by operating segment

Commercial Banking operating segment

The Commercial Banking operating segment serves all customers in Germany with a need for standardised or personalised service and advice. In this context, its Private Clients Bank and Unternehmer Bank business units offer a wide range of banking services. Depending on the service approach, a needs-based distinction is made within Commercial Banking between retail customers, wealth management & private banking clients, business and corporate customers, and commercial real estate customers. At the same time, the Commercial Banking operating segment builds on a shared “HypoVereinsbank” brand and a largely identical sales network.

In line with the universal bank model, the range of products and services of Commercial Banking enables comprehensive customer support to be provided. This extends from payment services, mortgage loans, consumer loans, savings-and-loan and insurance products and banking services for retail customers through to business loans and foreign trade financing for corporate customers, fund products for all asset classes, advisory and brokerage services in the securities business and liquidity and financial risk management, advisory services for high net worth private customers through to investment banking products for companies requiring capital-market access. The wealth management approach includes not only customised portfolio concepts and financing solutions for high net worth private customers with an entrepreneurial background but also the brokerage of shareholdings.

Segment Reporting (Continued)

The Private Clients Bank business unit serves customers in the Retail Banking, Wealth Management & Private Banking business as well as business customers in all areas of demand. In this context, we are continuing along the path already taken towards a root-and-branch modernisation by expanding our digital offering to become an omnichannel bank and are thus underlining our positioning as a provider of quality services. Our aspiration is to be the best customer bank in Germany: in terms of quality, innovation and empathy. To achieve this, we set high standards for the quality of advice given and services provided involving a modern approach and an innovative omni-channel business model. In the retail customer business, HVB's financial concept promotes a high standard of quality in advisory services and is one of the most innovative forms of personal advice provided in Germany. 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 property issues whereby customers 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 Unternehmer Bank business unit bundles the corporate banking business in Germany. The corporate banking business is the place where companies requiring complex advisory services on the Key Account relationship model find the right address for customised solutions, also in particular for large transaction volumes, capital market transactions and international issues.

In the SME (Small and Medium Enterprises) and Corporates relationship models, the product portfolio covers tailored financing offers, for example through the use of subsidies or leasing offers as well as solutions for the management of financial risks, in addition to the traditional bank 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.

The distinguishing features of the Real Estate relationship model are individual solutions for commercial real estate customers, institutional investors, residential construction firms, property developers and building contractors. In this context, customers benefit particularly from specific financing expertise, for example in the Real Estate Structured Finance and Loan Syndication product areas.

In addition to the Private Clients Bank and Unternehmer Bank business units, Commercial Banking comprises the Group Corporate Centre which includes profit contributions that do not fall within the scope of responsibility of the other business units. From the UniCredit corporate group's perspective, these activities are assigned to Commercial Banking Germany as the profit contributions concerned are generated in Germany. To synchronise with group-wide management, HVB Group applies this approach in its internal management. The Group Corporate Centre includes the Chief Financial Office, the Credit Risk Office and the Chief Executive Office and among other items, the profits and losses of consolidated subsidiaries and non-consolidated holdings, provided they are not assigned to other business units. Furthermore, this business unit incorporates the net income from securities holdings for which the Management Board is responsible. In addition, amounts related to decisions taken by management with regard to asset/liability management are recognised in this business unit. This includes contributions to earnings from securities and money trading activities involving UniCredit S.p.A. and its subsidiaries. The Group Corporate Centre business unit also includes the Real Estate Restructuring customer portfolio.

The market environment for Commercial Banking is characterised by persistently low interest rates, a fragmented competitive situation with a growing number of digital competitors and rising regulatory costs. In addition, increasing digitalisation is causing a lasting change in customer requirements, which is characterised by greater demand for omni-channel solutions and seamless customer experience. HVB Group is facing up to the challenges posed by this framework in Commercial Banking with a premium positioning and a diverse set of measures of growth and efficiency activities, which also include clearly defined digitalisation initiatives.

Corporate & Investment Banking (CIB) operating segment
CIB is a global operating segment of UniCredit. It has a matrix organisational structure and has business activities at the three most important Group companies: UniCredit Bank AG (HVB), UniCredit Bank Austria AG and UniCredit S.p.A.

The success of CIB's business stems from the close cooperation and interaction between customer care (CIB & Commercial Banking (CBK)) and the product units. In addition, intensive cooperation with other operating segments of the UniCredit corporate group, countries (for example CEE) and the relevant units of competence, such as CRO, Compliance or COO, are key factors for CIB's success.

As CIB acts as a global operating segment, all statements and definitions apply both to CIB within HVB Group and CIB at a global level. Through its CIB operating segment, which acts as a centre of competence for international markets and investment banking operations, HVB Group takes a share in structuring the global strategy of CIB. The member of UniCredit Bank AG's Management Board responsible for CIB has decided to apply the global CIB strategy to UniCredit Bank AG's CIB business in order to ensure a uniform approach worldwide for our customers.

CIB offers its customers:
– corporate banking and transaction services
– structured finance, capital markets and investment products
– access to Western, Central and Eastern Europe

The service units are organised horizontally:
Financial Institutions Group (FIG), Multinational Corporates (MNC), CIB Americas and CIB Asia Pacific.

Vertically, there are three product factories:
Financing & Advisory (F&A) provides customer support worldwide in the areas of Financial Sponsor Solutions (FSS), Infrastructure & Power Project Finance (IPPF), Natural Resources (NR), Securitisation, Receivables & Strategic Asset Financing (SRSAF) and Structured Trade and Export Finance (STEF). Further global business units include Global Syndicate & Capital Markets (GSCM), Corporate Finance Advisory (CFA) and Sustainable Finance Advisory (SFA). The local business units Corporate Structured Finance (CSF) and Real Estate Structured Finance (RESF) cooperate closely with Commercial Banking. The local unit Global Shipping (GLOS) conducts transactions worldwide. Portfolio and Pricing Management & Loans Agency (PPM) is responsible for the management of all LP (leveraged and project finance, covered by the Financial Sponsor Solutions, Infrastructure & Power Project Finance and Natural Resources business lines) portfolio transactions within UniCredit Group. RESF and CSF portfolios are managed by PPM (CBK and CIB) in cooperation with representatives of the sales channels at the level of UniCredit Bank AG.

Global Transaction Banking (GTB) 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.

The main product areas in cash management include clearing and foreign currency products, customer access through electronic channels of access, products in payment services and account information, liquidity management with cash pooling and other optimisation procedures, cash innovations with company customer cards and dealer solutions as well as the business with sight deposits.

Trade finance offers conventional international trade products such as guarantees, letters of credit, collection services, etc.

Working capital solutions in CIB offer products and solutions along the customer's entire value chain, such as the financing of receivables and payables, structured working capital solutions and factoring.

Segment Reporting (Continued)

Markets is a customer-oriented product area that supports business with UniCredit's corporate and institutional customers as an integral part of the CIB value chain. This product area extends over all asset classes: interest, foreign exchange, 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 external networks.

To achieve its objectives, CIB has developed and implemented several strategic initiatives in recent years, the basic purpose of which is to provide support to the relationship managers in their customer care tasks:
– industry sector specialists were put in place to significantly improve the quality of the strategic dialogue between the Bank and the top management of companies served. In addition, the initiative improves the level of knowledge in sales units
– shared goals, a structured objective-setting process between customer care units and product lines
– CIB & CBK joint ventures to ensure even better access to the investment banking platform of UniCredit Bank AG for our Mittelstand customers and offer CBK customers CIB investment products
– growing importance of the integrated approach along the value chain beyond team boundaries, e.g. working capital (operating resources)
– capital structure advisory, a focused and discerning strategic dialogue with customers to diversify their financing funds
– advice on sustainable finance, combined expertise in the field of sustainability topics/ESG with capital market processing
– digital transformation as a key factor for strategic positioning

CIB's strategy aims to further enhance its central role with core CIB customers and seize more opportunities with Mittelstand customers. Efforts are being made to expand and exploit cross-selling opportunities as well as underwriting and sales capacities in order to become the "bank of choice" for corporate customers. Another goal is to gain market shares in the area of trade finance. CIB wishes to leverage its international footprint by selling international services to customers in CIB's core countries, specifically refining its base in countries given special priority as well as unifying and improving its operating platform. CIB is also striving to heighten the service commitment for banks.

CIB maintains a close cooperation with Commercial Banking. Realising synergies within the UniCredit corporate group and promoting the "One Bank" approach continue to be one of UniCredit's main growth initiatives and are driven forward by the UniCredit International Centre ("UIC"). The Head of UIC Germany reports to the Management Board members responsible for CIB and Unternehmer Bank (UBK) in order to ensure an end-to-end and systematic approach to international business. The duties of the International Centre extend from serving inbound customers through to support for and coordination of outbound activities.

Other operating segment
The Other operating segment encompasses the Chief Operating Office (COO). It acts as a central internal service provider for customers and employees. COO activities extend to organisation, process and project management, corporate & cyber security, strategic real estate management, logistics, cost management and business support e.g. money market and derivatives, know your customer and accounting. Furthermore, the Data Protection Officer (DPO), the Chief Information Officer (CIO) and the Chief Security Officer (CSO) of HVB report directly to the COO. Payments, securities settlement, IT application development and IT operations, procurement and facility management have been outsourced and are monitored via the retained organisation functions in COO.

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.

6 Income statement, broken down by operating segment

Income statement, broken down by operating segment for the period from 1 January to 30 June 2021 (€ millions)

INCOME/EXPENSES	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	OTHER	CONSOLIDATION	HVB GROUP
Net interest	717	448	(4)	(1)	1,161
Dividends and other income from equity investments	—	10	—	—	10
Net fees and commissions	400	161	—	—	560
Net trading income	57	418	—	1	476
Net other expenses/income	21	(4)	30	(6)	41
OPERATING INCOME	**1,195**	**1,033**	**26**	**(6)**	**2,248**
Payroll costs	(480)	(187)	(60)	—	(727)
Other administrative expenses	(356)	(321)	78	6	(593)
Amortisation, depreciation and impairment losses					
on intangible and tangible assets	(7)	(5)	(42)	—	(54)
Operating costs	**(843)**	**(513)**	**(24)**	**6**	**(1,374)**
OPERATING PROFIT/(LOSS)	**353**	**520**	**2**	**—**	**875**
Net write-downs of loans and provisions for					
guarantees and commitments	(53)	83	—	—	29
NET OPERATING PROFIT/(LOSS)	**299**	**602**	**2**	**—**	**904**
Provisions for risks and charges	(109)	(203)	—	—	(312)
Restructuring costs	—	(1)	—	—	(1)
Net income from investments	6	3	2	—	11
PROFIT/(LOSS) BEFORE TAX	**196**	**402**	**4**	**—**	**602**
Income tax for the period	(76)	(177)	(3)	—	(256)
PROFIT/(LOSS) AFTER TAX	**119**	**225**	**2**	**—**	**346**
Purchase price allocation effect	—	—	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**119**	**225**	**2**	**—**	**346**
attributable to the shareholder of UniCredit Bank AG	119	225	2	—	346
attributable to minorities	—	—	—	—	—

Segment Reporting (Continued)

Reconciliation of the segmented income statement to the income statement from 1 January to 30 June 2021 (€ millions)

INCOME/EXPENSES	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSIFICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Net interest	1,161	(2)	8	1,167
Charged imputed cost of equity		—	8	
Reallocation of net interest from specific held-for-trading portfolios		1	—	
Compounding of provisions and of provisions for contingent liabilities		(3)	—	
Dividends and other income from equity investments	10	5	—	16
Dividends from assets mandatorily at FVTPL		5	—	
Net fees and commissions	560	20	—	581
Expense for purchased securities services for held-for-trading portfolios		20	—	
Net trading income	476	(52)	—	423
Financial assets mandatorily at FVTPL		32	—	
Financial liabilities designated at FVTPL		(22)	—	
Net gains/(losses) on the sale of securities (held-for-sale business model)		(1)	—	
Effects arising from hedge accounting		(44)	—	
Fair value measurement of equity instruments		(9)	—	
Buy-backs of securities issued – recognised at cost		—	—	
Net gains/(losses) on the sale of performing securities				
(hold-to-maturity business model)		(2)	—	
Dividends from assets mandatorily at FVTPL		(5)	—	
Reallocation of net interest from specific held-for-trading portfolios		(1)	—	
Net gains/(losses) on financial assets and liabilities at fair value	n/a	44	—	44
Financial assets mandatorily at FVTPL		(32)	—	
Financial liabilities designated at FVTPL		22	—	
Net gains/(losses) on the sale of securities				
(held-for-sale business model)		1	—	
Effects arising from hedge accounting		44	—	
Fair value measurement of equity instruments		9	—	
Net gains/(losses) on derecognition of financial				
instruments measured at cost	n/a	(1)	—	(1)
Net gains/(losses) on the sale of performing loans and receivables, and				
securities (hold-to-maturity business model)		(1)	—	
Buy-backs of securities issued – recognised at cost		—	—	
Net other expenses/income	41	(166)	9	(116)
Net gains/(losses) on the sale of performing loans and receivables				
(hold-to-maturity business model)		3	—	
Income from the sale of land and buildings		—	—	
Income from the valuation/disposal of investment properties		18	—	
Income from the sale of other assets		—	—	
European bank levy		(193)	—	
Other effects		1	—	
Net gains/(losses) on disposals of investments		5	—	
Adjustment of managerial scope of consolidation		—	9	
OPERATING INCOME	**2,248**	**(152)**	**17**	**2,114**
Payroll costs	(727)	—	(6)	(733)
Adjustment of managerial scope of consolidation		—	(6)	
Other administrative expenses	(593)	(46)	(2)	(641)
Adjustment of managerial scope of consolidation		—	(2)	
Deposit guarantee scheme		(30)	—	
Other effects		(1)	—	
Expense for purchased securities services for held-for-trading portfolios		(20)	—	
Depreciation on leasehold improvements in buildings		5	—	

(€ millions)

INCOME/EXPENSES	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSIFICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Amortisation, depreciation and impairment losses				
on intangible and tangible assets	(54)	(5)	—	(58)
Depreciation on leasehold improvements in buildings		(5)	—	
Operating costs	**(1,374)**	**(51)**	**(8)**	**(1,432)**
OPERATING PROFIT/(LOSS)	**875**	**(203)**	**9**	**682**
Net write-downs of loans and provisions for guarantees and commitments/				
Credit impairment losses IFRS 9	29	5	—	34
Impairment/write-backs on securities at cost and at FVTOCI		4	—	
Compounding of provisions for contingent liabilities		1	—	
NET OPERATING PROFIT/(LOSS)	**904**	**(198)**	**9**	**716**
Provisions for risks and charges	(312)	226	—	(88)
European bank levy and deposit guarantee scheme		223	—	
Compounding of provisions		3	—	
Irrevocable payment commitments provided for bank levy and deposit				
guarantee scheme recognised as an expense		—	—	
Restructuring costs	(1)	—	—	—
Net income from investments	11	(12)	1	n/a
Impairment/write-backs on debt securities at cost and at FVTOCI		(4)	—	
Income from the sale of land and buildings		—	—	
Income from the valuation/disposal of investment properties		(18)	—	
Income from the sale of other assets		—	—	
Net gains/(losses) on disposals of investments		10	1	
Net gains/(losses) on disposals of investments	n/a	(15)	4	(11)
PROFIT/(LOSS) BEFORE TAX	**602**	**—**	**14**	**617**
Income tax for the period	(256)	—	(3)	(259)
PROFIT/(LOSS) AFTER TAX	**346**	**—**	**11**	**358**
Purchase price allocation effect	—	—	—	—
Purchase price allocation effect on land and buildings		—	—	
CONSOLIDATED PROFIT/(LOSS)	**346**	**—**	**11**	**358**
attributable to the shareholder of UniCredit Bank AG	346	—	11	358
attributable to minorities	—	—	—	—

Segment Reporting (Continued)

Income statement, broken down by operating segment for the period from 1 January to 30 June 2020 (€ millions)

INCOME/EXPENSES	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	OTHER	CONSOLIDATION	HVB GROUP
Net interest	803	448	(2)	—	1,249
Dividends and other income from equity investments	—	—	—	—	—
Net fees and commissions	365	140	(1)	—	504
Net trading income	12	66	—	—	78
Net other expenses/income	27	16	34	(6)	71
OPERATING INCOME	**1,208**	**669**	**32**	**(7)**	**1,903**
Payroll costs	(482)	(180)	(59)	—	(721)
Other administrative expenses	(346)	(328)	80	7	(586)
Amortisation, depreciation and impairment losses					
on intangible and tangible assets	(10)	(5)	(43)	—	(57)
Operating costs	**(837)**	**(513)**	**(21)**	**7**	**(1,365)**
OPERATING PROFIT/(LOSS)	**371**	**157**	**11**	**—**	**538**
Net write-downs of loans and provisions for					
guarantees and commitments	(225)	(240)	—	—	(465)
NET OPERATING PROFIT/(LOSS)	**146**	**(83)**	**11**	**—**	**73**
Provisions for risks and charges	(67)	(97)	—	—	(164)
Restructuring costs	(1)	(3)	(16)	—	(19)
Net income from investments	—	(3)	554	—	551
PROFIT/(LOSS) BEFORE TAX	**79**	**(186)**	**549**	**—**	**442**
Income tax for the period	12	11	(180)	—	(157)
PROFIT/(LOSS) AFTER TAX	**90**	**(174)**	**370**	**—**	**285**
Purchase price allocation effect	—	—	(49)	—	(49)
CONSOLIDATED PROFIT/(LOSS)	**90**	**(174)**	**320**	**—**	**235**
attributable to the shareholder of UniCredit Bank AG	90	(174)	320	—	235
attributable to minorities	—	—	—	—	—

Reconciliation of the segmented income statement to the income statement from 1 January to 30 June 2020 (€ millions)

INCOME/EXPENSES	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSI-FICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Net interest	1,249	16	26	1,291
Charged imputed cost of equity		—	26	
Reallocation of net interest from specific held-for-trading portfolios		17	—	
Compounding of provisions		(1)	—	
Dividends and other income from equity investments	—	6	—	6
Dividends from assets mandatorily at FVTPL		6	—	
Net fees and commissions	504	22	—	526
Expense for purchased securities services for held-for-trading portfolios		22	—	
Net trading income	78	180	—	258
Financial assets mandatorily at FVTPL		50	—	
Financial liabilities designated at FVTPL		158	—	
Net gains/(losses) on the sale of securities (held-for-sale business model)		(12)	—	
Effects arising from hedge accounting		20	—	
Fair value measurement of equity instruments		(10)	—	
Buy-backs of securities issued – recognised at cost		—	—	
Net gains/(losses) on the sale of performing securities				
(hold-to-maturity business model)		(3)	—	
Dividends from assets mandatorily at FVTPL		(6)	—	
Reallocation of net interest from specific held-for-trading portfolios		(17)	—	
Net gains/(losses) on financial assets and liabilities at fair value	n/a	(206)	—	(206)
Financial assets mandatorily at FVTPL		(50)	—	
Financial liabilities designated at FVTPL		(158)	—	
Net gains/(losses) on the sale of securities (held-for-sale business model)		12	—	
Effects arising from hedge accounting		(20)	—	
Fair value measurement of equity instruments		10	—	
Net gains/(losses) on derecognition of financial instruments measured at cost	n/a	2	—	2
Net gains/(losses) on the sale of performing loans and receivables, and				
securities at cost (hold-to-maturity business model)		2	—	
Buy-backs of securities issued – recognised at cost		—	—	
Net other expenses/income	71	425	8	504
Net gains/(losses) on the sale of performing loans and receivables at cost				
(hold-to-maturity business model)		1	—	
Income from the sale of land and buildings		549	—	
Income from the valuation/disposal of investment properties		—	—	
Income from the sale of other assets		—	—	
European bank levy		(126)	—	
Other effects		1	—	
Adjustment of managerial scope of consolidation		—	8	
OPERATING INCOME	**1,903**	**445**	**34**	**2,381**
Payroll costs	(721)	—	(4)	(725)
Adjustment of managerial scope of consolidation		—	(4)	
Other administrative expenses	(586)	(33)	(1)	(620)
Adjustment of managerial scope of consolidation		—	(1)	
Deposit guarantee scheme		(15)	—	
Other effects		(1)	—	
Expense for purchased securities services for held-for-trading portfolios		(22)	—	
Depreciation on leasehold improvements		5	—	

Segment Reporting (Continued)

Reconciliation of the segmented income statement to the income statement from 1 January to 30 June 2020 (€ millions)

INCOME/EXPENSES	INCOME STATEMENT, BROKEN DOWN BY OPERATING SEGMENT	RECLASSI-FICATION	ACCOUNTING AND VALUATION DIFFERENCES	CONSOLIDATED INCOME STATEMENT
Amortisation, depreciation and impairment losses on intangible and				
tangible assets	(57)	(5)	—	(62)
Depreciation of leasehold improvements		(5)	—	
Operating costs	**(1,365)**	**(38)**	**(5)**	**(1,407)**
OPERATING PROFIT/(LOSS)	**538**	**407**	**29**	**974**
Net write-downs of loans and provisions for guarantees and commitments/				
Credit impairment losses IFRS 9	(465)	(2)	—	(467)
Impairment/write-backs on debt securities at cost and at FVTOCI		(2)	—	
NET OPERATING PROFIT/(LOSS)	**73**	**405**	**29**	**507**
Provisions for risks and charges	(164)	142	30	8
European bank levy and deposit guarantee scheme		141	—	
Compounding of provisions		1	—	
Irrevocable payment commitments provided for bank levy and				
deposit guarantee scheme recognised as an expense		—	30	
Restructuring costs	(19)	—	—	(19)
Net income from investments	551	(547)	(4)	n/a
Impairment/write-backs on debt securities at cost and at FVTOCI		2	—	
Income from the sale of land and buildings		(549)	(4)	
Income from the valuation/disposal of investment properties		—	—	
Income from the sale of other assets		—	—	
Net gains/(losses) on disposals of investments		—	—	
Net gains/(losses) on disposal of investments	n/a	—	—	—
PROFIT/(LOSS) BEFORE TAX	**442**	**—**	**55**	**496**
Income tax for the period	(157)	—	(10)	(167)
PROFIT/(LOSS) AFTER TAX	**285**	**—**	**45**	**329**
Purchase price allocation effect	(49)	—	49	—
Purchase price allocation effect on land and buildings		—	49	
CONSOLIDATED PROFIT/(LOSS)	**235**	**—**	**94**	**329**
attributable to the shareholder of UniCredit Bank AG	235	—	94	329
attributable to minorities	—	—	—	—

Development of the Commercial Banking operating segment (€ millions)

INCOME/EXPENSES	1/1–30/6/2021	1/1–30/6/2020
Net interest	717	803
Dividends and other income from equity investments	—	—
Net fees and commissions	400	365
Net trading income	57	12
Net other expenses/income	21	27
OPERATING INCOME	**1,195**	**1,208**
Payroll costs	(480)	(482)
Other administrative expenses	(356)	(346)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(7)	(10)
Operating costs	**(843)**	**(837)**
OPERATING PROFIT/(LOSS)	**353**	**371**
Net write-downs of loans and provisions for guarantees and commitments	(53)	(225)
NET OPERATING PROFIT/(LOSS)	**299**	**146**
Provisions for risks and charges	(109)	(67)
Restructuring costs	—	(1)
Net income from investments	6	—
PROFIT/(LOSS) BEFORE TAX	**196**	**79**
Income tax for the period	(76)	12
PROFIT/(LOSS) AFTER TAX	**119**	**90**
Purchase price allocation effect	—	—
CONSOLIDATED PROFIT/(LOSS)	**119**	**90**
attributable to the shareholder of UniCredit Bank AG	119	90
attributable to minorities	—	—
Cost-income ratio in %[1]	70.5	69.3

1 Ratio of operating costs to operating income.

In the first half of 2021, the Commercial Banking operating segment generated an operating profit (before net write-downs of loans and provisions for guarantees and commitments) of €353 million, which is thus a marked €18 million, or 4.9%, lower than the previous year's level.

Operating income, at €1,195 million, was a slight €13 million, or 1.0%, lower than the previous year and thus almost matched the level of €1,208 million in the previous-year period. At €717 million, net interest contained in operating income was a substantial €86 million or 10.7% lower than the figure of €803 million in the previous-year period despite the still extremely low level of interest rates. The decline is largely attributable to interest income of €62 million from a tax refund in the previous-year period. In addition, the persistently ultra-low interest rates continued to weigh heavily on the customer deposit business and on the consumer credit business which was, however, partially compensated by a further slight increase in real estate financing in the retail banking business. In corporate customer activities, a slight increase was achieved in income in the lending business. In the deposit-taking operations of the Unternehmerbank, the decline in income due to the persistently low market interest rate level was compensated in part by an adjustment in customer interest rates (introduction and expansion of negative interest rates).

Segment Reporting (Continued)

Compared with the previous-year period, net fees and commissions increased significantly by €35 million, or 9.6%, to €400 million, which is primarily attributable to a substantial increase in the securities business.

There was a sharp increase of €45 million in net trading income, which was up from €12 million in the previous-year period to €57 million in the reporting period. This is due to the positive effects from valuation adjustments for the fair value measurement of derivatives with corporate customers.

Net other expenses/income reports an income of €21 million for the reporting period. This represents a sharp decline of €6 million compared with income of €27 million in the previous-year period.

Compared with the previous-year period, operating costs were up by €6 million, or 0.7%, to €843 million in the first half of 2021. This is largely due to higher other administrative expenses, which were up by a marked €10 million, or 2.9%, to €356 million compared with the previous-year period. The increase is attributable to higher IT expenses and higher internal charges from other service units of the Bank.

The cost-income ratio rose slightly to 70.5% in the current reporting period compared with 69.3% in the previous-year period.

At €53 million, the item "net write-downs of loans and provisions for guarantees and commitments" shows a significant decline of €172 million in net additions compared with the figure of €225 million in the previous-year period. This development is attributable to the significant recovery in economic activity, while the first half of 2020 was adversely affected by the impact of the COVID-19 pandemic.

Net operating profit of €299 million was thus a very significant €153 million higher than the profit of €146 million generated in the previous-year period.

In the reporting period, there was a net expense of €109 million from provisions for risks and charges after €67 million in the previous-year period. This is mainly due to higher payments to the SRF/DGS (European bank levy).

Net income from investments reports income of €6 million in the current reporting period after reporting a neutral result of €0 million in the previous-year period.

Overall, the Commercial Banking operating segment generated profit before tax of €196 million in the reporting period, which is considerably higher than the previous-year figure of €79 million as a result of the net addition to net write-downs of loans and provisions for guarantees and commitments.

At €76 million, income tax for the period shows a sharp increase in tax expense compared with tax income of €12 million in the previous-year period.

The Commercial Banking operating segment reports profit after tax of €119 million for the reporting year, which is considerably higher than the comparative figure of the previous-year period of €90 million.

Development of the Corporate & Investment Banking operating segment (€ millions)

INCOME/EXPENSES	1/1–30/6/2021	1/1–30/6/2020
Net interest	448	448
Dividends and other income from equity investments	10	—
Net fees and commissions	161	140
Net trading income	418	66
Net other expenses/income	(4)	16
OPERATING INCOME	**1,033**	**669**
Payroll costs	(187)	(180)
Other administrative expenses	(321)	(328)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(5)	(5)
Operating costs	**(513)**	**(513)**
OPERATING PROFIT/(LOSS)	**520**	**157**
Net write-downs of loans and provisions for guarantees and commitments	83	(240)
NET OPERATING PROFIT/(LOSS)	**602**	**(83)**
Provisions for risks and charges	(203)	(97)
Restructuring costs	(1)	(3)
Net income from investments	3	(3)
PROFIT/(LOSS) BEFORE TAX	**402**	**(186)**
Income tax for the period	(177)	11
PROFIT/(LOSS) AFTER TAX	**225**	**(174)**
Purchase price allocation effect	—	—
CONSOLIDATED PROFIT/(LOSS)	**225**	**(174)**
attributable to the shareholder of UniCredit Bank AG	225	(174)
attributable to minorities	—	—
Cost-income ratio in %[1]	49.7	76.5

1 Ratio of operating costs to operating income.

In the reporting period, the Corporate & Investment Banking operating segment generated operating income of €1,033 million, which was thus a very substantial 54.4% higher than the income of €669 million in the previous-year period.

The primary cause of this development in 2021 is the sharp rise of €352 million to €418 million in net trading income. This increase is partly due to the fact that the year-ago result was negatively affected by market turbulence relating to the COVID-19 pandemic and the associated higher valuation adjustments. Following the cessation of the adverse effects of COVID-19 in the previous year, the distinctly positive contribution to earnings in the first half of 2021 from valuation adjustments, which essentially includes credit value adjustments and funding value adjustments, and the positive trend in customer business in the areas of fixed-income products as well as equity and commodity products contributed to the increase in net trading income.

Segment Reporting (Continued)

At €448 million, net interest remained unchanged in the reporting period compared with the previous-year period.

Dividends and other income from equity investments came to €10 million (previous-year period: €0 million). In the current year, significant income was generated in connection with a financial investment.

Net fees and commissions increased significantly by €21 million, or 15.0%, to €161 million in the reporting period compared with the previous-year figure of €140 million. This development is based on higher credit commissions and advisory fees due to greater demand by companies for equity or borrowings using capital market products, such as bonds or share issues.

Net other expenses/income shows an expense of €4 million, whereas in the previous-year period income of €16 million was reported.

At €513 million, operating costs are unchanged in the reporting period compared with the previous-year period. The rise of €7 million, or 3.9%, to €187 million in payroll costs was offset by the decline of €7 million in other administrative expenses. At €5 million, depreciation remained at the previous year's level.

Due to the higher earnings, the cost-income ratio fell to 49.7% in the reporting period after 76.5% in the previous-year period.

With a net reversal of €83 million, the item "net write-downs of loans and provisions for guarantees and commitments" improved significantly by €323 million compared with a net addition of €240 million in the previous-year period.

Net operating profit recognised in the current reporting period amounts to €602 million, which is €685 million higher than the loss of €83 million reported in the previous-year period.

In the first half of 2021, there were net provisions for risks and charges of €203 million after €97 million in the previous-year period. This increase is mainly due to the setting aside of a provision for the fine imposed for infringing cartel law in connection with trading in EU government bonds as well as to higher payments to the SRF/DGS (European bank levy).

At €3 million, net income from investments was higher than the figure in the previous-year period of minus €3 million.

The Corporate & Investment Banking operating segment generated profit before tax of €402 million in the reporting period, which is thus considerably higher than the previous year's loss of €186 million.

Income tax for the period shows a tax expense of €177 million in the reporting period whereas there was tax income of €11 million in the previous-year period.

The Corporate & Investment Banking operating segment reports profit after tax of €225 million for the reporting year compared with the loss of €174 million in the previous-year period.

Development of the Other operating segment (€ millions)

INCOME/EXPENSES	1/1–30/6/2021	1/1–30/6/2020
Net interest	(4)	(2)
Dividends and other income from equity investments	—	—
Net fees and commissions	—	(1)
Net trading income	—	—
Net other expenses/income	30	34
OPERATING INCOME	**26**	**32**
Payroll costs	(60)	(59)
Other administrative expenses	78	80
Amortisation, depreciation and impairment losses on intangible and tangible assets	(42)	(43)
Operating costs	**(24)**	**(21)**
OPERATING PROFIT/(LOSS)	**2**	**11**
Net write-downs of loans and provisions for guarantees and commitments	—	—
NET OPERATING PROFIT/(LOSS)	**2**	**11**
Provisions for risks and charges	—	—
Restructuring costs	—	(16)
Net income from investments	2	554
PROFIT/(LOSS) BEFORE TAX	**4**	**549**
Income tax for the period	(3)	(180)
PROFIT/(LOSS) AFTER TAX	**2**	**370**
Purchase price allocation effect	—	(49)
CONSOLIDATED PROFIT/(LOSS)	**2**	**320**
attributable to the shareholder of UniCredit Bank AG	2	320
attributable to minorities	—	—
Cost-income ratio in %[1]	92.3	65.6

1 Ratio of operating costs to operating income.

The Other operating segment generated operating income of €26 million in the reporting period, which is thus €6 million, or 18.8%, significantly lower than the figure of €32 million reported in the previous-year period.

The substantial rise in operating costs of €3 million to €24 million is largely due to an increase in payroll costs while other administrative expenses decreased.

The Other operating segment generated operating profit of €2 million in the reporting period, which is a sharp €9 million, or 81.8%, below the previous-year period of €11 million.

On account of the significant decline in operating income and the marked increase in operating costs, the cost-income ratio increased to 92.3% in the reporting period after 65.6% in the previous-year period.

In the Other operating segment, no expenses arose for net write-downs of loans and provisions for guarantees and commitments in the reporting period or in the previous-year period.

Net operating profit thus totalled €2 million and is a sharp €9 million, or 81.8%, considerably lower than the previous-year figure of €11 million.

Segment Reporting (Continued)

Provisions for risks and charges show no expenses in the reporting period or in the previous-year period.

In the reporting period, no expenses are reported under restructuring costs, which means they are €16 million lower than the previous-year period.

At €2 million, net income from investments posted a very significant decline of €552 million compared with the previous-year period. The income recognised under this item in the previous-year period is primarily attributable to the sale of the "Am Tucherpark" site, which was completed in early 2020.

Overall, the Other operating segment generated profit before tax of €4 million in the reporting period compared with the profit before tax of €549 million in the previous-year period, which is primarily attributable to net income from investments.

On account of the net income from investments generated in the previous-year period, the income tax for the period fell sharply to €3 million after €180 million in the same period last year.

The effect from the purchase price allocation came to €0 million in the reporting period and thus improved sharply by €49 million, or 100%, compared with the negative effect of €49 million in the previous-year period. The previous year's expenses arose in connection with the sale of the "Am Tucherpark" site as a result of the reversal of the remaining valuation adjustments that occurred upon UniCredit's first-time consolidation of HVB Group.

For the reporting year, the Other operating segment reported consolidated profit of €2 million, which represents a very substantial decrease of €318 million compared with the previous year's figure of €320 million.

7 Balance-sheet figures, broken down by operating segment (€ millions)

	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	OTHER	CONSOLIDATION	HVB GROUP
Loans and receivables with banks (at cost)					
30/6/2021	899	34,276	718	(905)	34,988
31/12/2020	611	44,474	970	(1,078)	44,977
Loans and receivables with customers (at cost)[1]					
30/6/2021	89,793	35,745	—	(1,446)	124,092
31/12/2020	87,735	39,679	—	(1,740)	125,674
Deposits from customers					
30/6/2021	103,580	33,827	3	(892)	136,518
31/12/2020	104,055	40,337	—	(1,086)	143,306
Risk-weighted assets compliant					
with Basel III (including equivalents for					
market risk and operational risk)					
30/6/2021	35,948	42,025	3,843	—	81,816
31/12/2020	34,415	40,289	3,901	—	78,605

1 "Loans and receivables with customers (at cost)" do not contain any securities holdings for internal management purposes.

Notes to the Income Statement

8 Net interest

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Interest income	1,523	1,880
from financial assets at cost	1,079	1,299
from financial assets at FVTOCI	19	28
from financial assets at FVTPL and hedging derivatives	267	255
from financial assets held for trading	107	187
other interest income	51	111
Negative interest on financial assets	(176)	(66)
Interest expense	(479)	(681)
from financial liabilities at cost	(306)	(384)
of which from lease liabilities	(3)	(3)
from financial liabilities at FVTPL and hedging derivatives	(32)	(45)
from financial liabilities held for trading	(121)	(220)
other interest expense	(20)	(32)
Negative interest on financial liabilities	299	158
Total	**1,167**	**1,291**

The negative interest on financial liabilities includes €108 million relating to the participation in the ECB's TLTRO III programme set up in the reporting year. 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)

	1/1–30/6/2021	1/1–30/6/2020
Non-consolidated affiliates	(31)	11
of which:		
UniCredit S.p.A.	(38)	2
sister companies	7	9
subsidiaries	—	—
Joint ventures	—	—
Associates	—	1
Other investees	5	5
Total	**(26)**	**17**

Notes to the Income Statement (Continued)

9 Dividends and other income from equity investments

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Dividends and other similar income	6	6
Companies accounted for using the equity method	10	—
Total	**16**	**6**

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 reporting year. The result is thus significantly higher compared with the previous year.

10 Net fees and commissions

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Fee and commission income	736	699
Securities services for customers	363	336
Payment transactions	140	144
Lending business	87	79
Guarantees	63	63
Distribution of third-party products	52	49
Other commission income	31	28
Fee and commission expense	(155)	(173)
Securities services for customers	(90)	(91)
Payment transactions	(33)	(33)
Lending business	(3)	(4)
Guarantees	(2)	(2)
Distribution of third-party products	—	—
Other commission expense	(27)	(43)
Net fees and commissions	**581**	**526**

Net fees and commissions from related parties

The item “Net fees and commissions” includes the following amounts attributable to related parties:

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Non-consolidated affiliates	(9)	(7)
of which:		
UniCredit S.p.A.	2	3
sister companies	(11)	(11)
subsidiaries	—	1
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**(9)**	**(7)**

11 Net trading income

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Net gains on financial instruments held for trading[1]	423	258
Total	**423**	**258**

1 Including dividends on financial instruments held for trading.

Valuation discounts resulting from the fair value measurement of derivatives, particularly credit value adjustments and funding value adjustments, are recognised under net trading income. In the reporting year, the decrease in valuation discounts when determining fair values increased net trading income by €157 million (previous year: minus €216 million).

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

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Financial assets mandatorily at FVTPL	(32)	(50)
Financial liabilities designated at FVTPL	22	(158)
Derecognition from OCI	1	12
Effects arising from hedge accounting	44	(20)
Fair value equity	9	10
Total	**44**	**(206)**

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Fair value hedges	44	(20)
Changes in fair value of hedged items	563	(145)
Portfolio fair value hedges	678	(267)
Micro fair value hedges	(115)	122
Changes in fair value of hedging instruments	(519)	125
Portfolio fair value hedges	(633)	247
Micro fair value hedges	114	(122)
Cash flow hedges	—	—
Net gains/(losses) on the cash flows hedges (only ineffective part)	—	—
Total	**44**	**(20)**

Notes to the Income Statement (Continued)

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

Micro fair value hedge for holdings at FVTOCI (€ millions)

	REMAINING TERM			CUMULATIVE AMOUNT OF THE HEDGE-RELATED ADJUSTMENT TO THE FAIR VALUE INCLUDED IN THE CARRYING AMOUNT OF THE HEDGED ITEM RECOGNISED IN THE BALANCE SHEET		CARRYING AMOUNT		CHANGE IN FAIR VALUE USED TO RECOGNISE AN INEFFECTIVENESS IN THE HEDGE FOR THE PERIOD
	LESS THAN 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	
Balance at 30/6/2021								
Nominal								
Hedged items	1,760	8,523	1,948	—	—	—	—	—
Hedging transactions	1,760	8,523	1,948	—	—	—	—	—
Interest rate sensitivities in BPV								
Hedged items	—	(3)	(1)	—	—	—	—	—
Hedging transactions	—	3	1	—	—	—	—	—
Balance sheet values								
Hedged items	—	—	—	149	—	12,590	—	—
Hedging transactions	—	—	—	—	—	4	261	—
Hedge result								(1)
Hedged items	—	—	—	—	—	—	—	(115)
Hedging transactions	—	—	—	—	—	—	—	114
Balance at 31/12/2020								
Nominal								
Hedged items	528	8,828	2,250	—	—	—	—	—
Hedging transactions	528	8,828	2,250	—	—	—	—	—
Interest rate sensitivities in BPV								
Hedged items	—	(3)	(2)	—	—	—	—	—
Hedging transactions	—	3	2	—	—	—	—	—
Balance sheet values								
Hedged items	—	—	—	257	—	12,087	—	—
Hedging transactions	—	—	—	—	—	—	348	—
Hedge result								1
Hedged items	—	—	—	—	—	—	—	200
Hedging transactions	—	—	—	—	—	—	—	(199)

The table above 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.

Portfolio fair value hedge

(€ millions)

	REMAINING TERM			CUMULATIVE AMOUNT OF THE HEDGE-RELATED ADJUSTMENT TO THE FAIR VALUE INCLUDED IN THE CARRYING AMOUNT OF THE HEDGED ITEM RECOGNISED IN THE BALANCE SHEET		CARRYING AMOUNT		CHANGE IN FAIR VALUE USED TO RECOGNISE AN INEFFECTIVENESS IN THE HEDGE FOR THE PERIOD
	LESS THAN 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	
Balance at 30/6/2021								
Interest rate sensitivities in BPV								
Hedged items								
EUR	—	2	18	—	—	—	—	—
USD	—	—	—	—	—	—	—	—
CHF	—	—	—	—	—	—	—	—
GBP	—	—	—	—	—	—	—	—
JPY	—	—	(1)	—	—	—	—	—
Hedging transactions								
EUR	—	(2)	(17)	—	—	—	—	—
USD	—	—	—	—	—	—	—	—
CHF	—	—	—	—	—	—	—	—
GBP	—	—	—	—	—	—	—	—
JPY	—	—	1	—	—	—	—	—
Balance sheet values								
Hedged items	—	—	—	33	1,305	—	—	—
Hedging transactions	—	—	—	—	—	236	303	—
Hedge result								45
Hedged items	—	—	—	—	—	—	—	678
Hedging transactions	—	—	—	—	—	—	—	(633)
Balance at 31/12/2020								
Interest rate sensitivities in BPV								
Hedged items								
EUR	—	3	11	—	—	—	—	—
USD	—	—	—	—	—	—	—	—
CHF	—	—	—	—	—	—	—	—
GBP	—	—	—	—	—	—	—	—
JPY	—	(1)	—	—	—	—	—	—
Hedging transactions								
EUR	—	(3)	(10)	—	—	—	—	—
USD	—	—	—	—	—	—	—	—
CHF	—	—	—	—	—	—	—	—
GBP	—	—	—	—	—	—	—	—
JPY	—	1	—	—	—	—	—	—
Balance sheet values								
Hedged items	—	—	—	70	(45)	—	—	—
Hedging transactions	—	—	—	—	—	372	405	—
Hedge result								(60)
Hedged items	—	—	—	—	—	—	—	(251)
Hedging transactions	—	—	—	—	—	—	—	191

Notes to the Income Statement (Continued)

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 € millions if the interest rate changes by one basis point (BPV or 0.01%).

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

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Loans and receivables (performing)	(3)	(1)
Buy-backs of securities issued	—	—
Promissory notes (assets side)	2	3
Total	**(1)**	**2**

14 Net other expenses/income

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Other income	116	671
Disposal of land and buildings	—	549
Rental income	31	36
Valuation/disposal of investment properties	24	7
Other	61	79
Other expenses	(232)	(167)
Disposal of land and buildings	—	—
Valuation/disposal of investment properties	(11)	(8)
Expenses of investment properties	(5)	(8)
Bank levy	(193)	(126)
Other	(23)	(25)
Total	**(116)**	**504**

Income from the disposal of land and buildings recognised in the previous-year period is mainly from the sale of the “Am Tucherpark” site, which was completed at the beginning of 2020.

Net other expenses/income attributable to related parties

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

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Non-consolidated affiliates	41	37
of which:		
UniCredit S.p.A.	5	5
sister companies	36	32
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**41**	**37**

15 Operating costs

(€ millions)

	1/1/–30/6/2021	1/1/–30/6/2020
Payroll costs	(733)	(725)
Wages and salaries	(576)	(571)
Social security costs	(91)	(90)
Expenses for pensions and similar employee benefits	(66)	(64)
Other administrative expenses	(641)	(620)
Amortisation, depreciation and impairment losses	(58)	(62)
on property, plant and equipment	(32)	(33)
on software and other intangible assets, excluding goodwill	(1)	(4)
on right-of-use assets (leases)	(25)	(25)
Total	**(1,432)**	**(1,407)**

Operating costs of related parties

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

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Non-consolidated affiliates	(322)	(312)
of which:		
UniCredit S.p.A.	(8)	(9)
sister companies	(308)	(303)
subsidiaries	(6)	—
Joint ventures	—	—
Associates	—	—
Other investees	**—**	**—**
Total	(322)	(312)

Notes to the Income Statement (Continued)

16 Credit impairment losses IFRS 9

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Additions	(404)	(732)
Allowances for losses on loans and receivables at cost	(274)	(578)
Allowances for losses on loans and receivables at FVTOCI	(1)	(2)
Allowances for losses on guarantees and indemnities	(129)	(152)
Reversals	415	244
Allowances for losses on loans and receivables at cost	254	166
Allowances for losses on loans and receivables at FVTOCI	—	—
Allowances for losses on guarantees and indemnities	161	78
Gains/(losses) from non-substantial modification	1	—
Recoveries from write-offs of loans and receivables	17	21
Gains/(losses) on the disposal of impaired loans and receivables	5	—
Total	**34**	**(467)**

While a net income of €34 million was generated from the reversal of credit impairment losses (IFRS 9) in the reporting period, an expense of €467 million accrued in the previous-year period. The marked recovery in economic activity had an impact on this development, whereas the first half of 2020 was weighed down by the effects of the COVID-19 pandemic.

It was thus possible to reverse portfolio valuation allowances totalling €10 million in the first half of 2021, while €274 million had to be added in the previous-year period. In the reporting period, the adjustment of the assumptions used to reflect future economic conditions had a positive effect, particularly the adjustment of the growth rates for the gross domestic product based on the economic recovery that is setting in. This effect was almost offset by the introduction of new PD models for retail and business customers. Effects resulting from rating adjustments for existing credit exposures and transfers between Stages 1 and 2 have also largely cancelled each other out, leaving a reversal of €10 million in general loan-loss provisions. In the previous-year period, the pandemic-driven adjustment of the assumptions used to reflect future economic conditions had a negative impact and in total resulted in an addition of €274 million in general loan-loss provisions.

In addition, there was a reversal of specific valuation allowances of net €24 million in the reporting period. Additions to specific valuation allowances on account of defaults were overcompensated by reversals of existing specific valuation allowances. The feared wave of defaults due to the Covid-19 pandemic has not occurred to date, partly as a result of an improved macroeconomic environment. In contrast, an addition of €193 million in specific valuation allowances was necessary in the previous-year period on account of a few larger individual cases.

Credit impairment losses IFRS 9 attributable to related parties

The item “Credit impairment losses IFRS 9” includes the following amounts attributable to related parties:

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Non-consolidated affiliates	—	—
of which:		
UniCredit S.p.A.	—	—
sister companies	—	—
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**—**	**—**

17 Provisions for risks and charges

In the reporting period, net expenses from the addition of provisions for risks and charges amounted to €88 million. This is offset by net income of €8 million reported in the previous-year period from the reversal of provisions. Individual items of significance in the reporting period relate to the setting aside of a provision of €69 million in penalty payments to the EU Commission, which imposed these in the second quarter for infringing cartel law in connection with EU government bonds. Otherwise, a provision in the high single-digit millions was set aside for the consequences of the BGH judgement on the invalidity of certain clauses in the General Business Conditions.

18 Net gains/losses on disposals of investments

(€ millions)

	1/1–30/6/2021	1/1–30/6/2020
Shares in affiliates	(11)	—
Disposal of companies accounted for using the equity method	—	—
Write-downs	—	—
Total	**(11)**	**—**

Losses of €11 million on shares in affiliates are largely due to the deconsolidation of immaterial subsidiaries.

19 Earnings per share

	1/1–30/6/2021	1/1–30/6/2020
Consolidated profit attributable to the shareholder (€ millions)	358	329
Average number of shares	802,383,672	802,383,672
Earnings per share (€) (undiluted and diluted)	0.45	0.41

Notes to the Balance Sheet

20 Financial assets held for trading

(€ millions)

	30/6/2021	31/12/2020
On-balance sheet financial instruments	37,443	26,353
Fixed-income securities	10,339	6,799
Equity instruments	8,113	6,559
Other financial assets held for trading	18,991	12,995
Positive fair value from derivative financial instruments	48,165	56,352
Total	**85,608**	**82,705**
of which: subordinated assets	4	4

Financial assets held for trading of related parties

The item “Financial assets held for trading” includes the following amounts attributable to related parties:

(€ millions)

	30/6/2021	31/12/2020
Non-consolidated affiliates	15,166	16,897
of which:		
UniCredit S.p.A.	11,622	12,564
sister companies[1]	3,544	4,333
Joint ventures	—	—
Associates	50	86
Other investees	3	3
Total	**15,219**	**16,986**

1 Mostly derivative transactions involving UniCredit Bank Austria AG.

21 Financial assets at FVTPL

(€ millions)

	30/6/2021	31/12/2020
Fixed-income securities	8,258	10,295
Equity instruments	138	122
Loans and promissory notes	1,308	973
Other	67	54
Total	**9,771**	**11,444**
of which:		
subordinated loans and receivables	24	23
past-due loans and receivables	—	1

22 Financial assets at FVTOCI

(€ millions)

	30/6/2021	31/12/2020
Fixed-income securities	12,872	12,471
Total	**12,872**	**12,471**

Changes in carrying amounts

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance 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]	405	(4)	—	—	401
Derecognition (due to incollectibility)	—	—	—	—	—
Other changes	—	—	—	—	—
Balance at 30/6/2021	**12,826**	**46**	**—**	**—**	**12,872**
Balance at 1/1/2020	**14,673**	**—**	**—**	**—**	**14,673**
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]	(2,252)	50	—	—	(2,202)
Derecognition (due to incollectibility)	—	—	—	—	—
Other changes	—	—	—	—	—
Balance at 31/12/2020	**12,421**	**50**	**—**	**—**	**12,471**

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

The impairment of securities holdings amounts to €4 million (previous year: €3 million). The change in impairment comes to €1 million (previous year: €3 million).

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

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

23 Loans and receivables with banks (at cost)

(€ millions)

	30/6/2021	31/12/2020
Current accounts	2,593	1,419
Cash collateral and pledged credit balances	5,890	8,295
Reverse repos	15,233	19,189
Securities	2,694	1,929
Other loans to banks	3,438	3,141
Non-performing loans and receivables	—	—
Total	**29,848**	**33,973**
of which subordinated assets	—	—

Notes to the Balance Sheet (Continued)

Changes in gross carrying amounts

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2021	**33,970**	**5**	**1**	**—**	**33,976**
Addition due to new business	15,927	—	—	—	15,927
Change in carrying amount within the stage	(972)	—	—	—	(972)
Transfers to another stage due to deterioration in credit quality	(1)	1	—	—	—
from Stage 1 to Stage 2	(1)	1	—	—	—
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	—	—	—	—	—
Changes due to modification of assets not leading to derecognition	—	—	—	—	—
Derecognition	(19,072)	(1)	—	—	(19,073)
Foreign currency movements and other changes	(6)	(1)	—	—	(7)
Balance at 30/6/2021	**29,850**	**—**	**1**	**—**	**29,851**
Balance at 1/1/2020	**31,809**	**38**	**1**	**—**	**31,848**
Addition due to new business	23,520	3	—	—	23,523
Change in carrying amount within the stage	9,480	(65)	—	—	9,415
Transfers to another stage due to deterioration in credit quality	(37)	37	—	—	—
from Stage 1 to Stage 2	(37)	37	—	—	—
from Stage 2 to Stage 3	—	—	—	—	—
from Stage 1 to Stage 3	—	—	—	—	—
Transfers to another stage due to improvement in credit quality	3	(3)	—	—	—
from Stage 2 to Stage 1	3	(3)	—	—	—
from Stage 3 to Stage 2	—	—	—	—	—
from Stage 3 to Stage 1	—	—	—	—	—
Increase reported directly in equity in gross carrying amounts					
for interest claims	—	—	—	—	—
Changes due to modification of assets not leading to derecognition	—	—	—	—	—
Derecognition	(30,810)	(6)	—	—	(30,816)
Foreign currency movements and other changes	5	1	—	—	6
Balance at 31/12/2020	**33,970**	**5**	**1**	**—**	**33,976**

Changes in allowances

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2021	**2**	**—**	**1**	**—**	**3**
Addition due to new business	2	—	—	—	2
Change in carrying amount within the same stage	(1)	—	—	—	(1)
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	—	—	—	—	—
Balance at 30/6/2021	**2**	**—**	**1**	**—**	**3**
Balance at 1/1/2020	**5**	**—**	**1**	**—**	**6**
Addition due to new business	1	—	—	—	1
Change in carrying amount within the same stage	1	—	—	—	1
Transfers to another stage due to deterioration in credit quality	—	1	—	—	1
from Stage 1 to Stage 2	—	1	—	—	1
from Stage 2 to Stage 3	—	—	—	—	—
from Stage 1 to Stage 3	—	—	—	—	—
Transfers to another stage due to improvement in credit quality	—	(1)	—	—	(1)
from Stage 2 to Stage 1	—	(1)	—	—	(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)	(4)	—	—	—	(4)
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 at 31/12/2020	**2**	**—**	**1**	**—**	**3**

Notes to the Balance Sheet (Continued)

Loans and receivables with related parties

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

(€ millions)

	30/6/2021	31/12/2020
Non-consolidated affiliates	7,635	11,044
of which:		
UniCredit S.p.A.	6,883	10,226
sister companies[1]	752	818
Joint ventures	—	—
Associates	17	17
Other investees	23	7
Total	**7,675**	**11,068**

1 Mainly due from UniCredit Bank Austria AG.

24 Loans and receivables with customers (at cost)

(€ millions)

	30/6/2021	31/12/2020
Current accounts	6,488	5,307
Cash collateral and pledged cash balances	2,645	3,279
Reverse repos	2,771	4,877
Mortgage loans	49,815	49,947
Finance leases	1,315	1,561
Securities	20,114	19,405
of which asset-backed securities (ABS)	11,442	11,716
Other loans and receivables	57,954	57,871
Non-performing loans and receivables	1,929	2,000
Total	**143,031**	**144,247**
of which: subordinated assets	2	4

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

Loans and receivables with customers (at cost) include an amount of €5,513 million (previous year: €5,087 million) funded under the fully consolidated Arabella conduit programme. This essentially involves buying short-term accounts payable 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, with the majority of the loans and receivables relating to German borrowers.

In the course of the COVID-19 pandemic, a raft of instruments and measures were created across all sectors as of spring 2020 to support the real economy, in particular moratoria as well as loans with government guarantees. In the previous year, HVB supported its customers with statutory consumer moratoria and also with moratoria for its corporate customers. In the meantime, the moratoria in particular have expired and as at 30 June 2021 there are hardly any more loans and receivables that are part of a moratorium.

In the context of the financial impact of the COVID-19 pandemic, HVB supported its customers with liquidity, among other things by extending loans that were provided with exemption from liability by the German government. In this connection aid measures are used at federal level, implemented by the KfW, as well as regional aid measures by various development banks. These programmes were launched in 2020 and continue to run in 2021. The KfW programmes are of special importance, in particular the following development loans: KfW Schnellkredit 2020, KfW Unternehmerkredit and ERP Gründerkredit. These programmes address different target groups and provide for the assumption of liability of between 80 and 100 percent by the German government. The carrying amount of the loans raised under KfW programmes and regional programmes totalled around €1.6 billion at 30 June 2021 (31 December 2020 to around €1.2 billion). The volume of the fast loans drawn amounted to an additional €0.4 billion at 30 June 2021 (31 December 2020: €0.3 billion, which are treated as trust loans and are not recognised.

Notes to the Balance Sheet (Continued)

Changes in gross carrying amounts

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2021	**119,903**	**22,903**	**3,324**	**27**	**146,157**
Addition due to new business	19,415	1,467	—	—	20,882
Change in carrying amount within the stage	(2,222)	(873)	52	—	(3,043)
Transfers to another stage due to deterioration in credit quality	(4,251)	4,047	204	—	—
from Stage 1 to Stage 2	(4,186)	4,186	—	—	—
from Stage 2 to Stage 3	—	(139)	139	—	—
from Stage 1 to Stage 3	(65)	—	65	—	—
Transfer to another stage due to improvement in credit quality	10,814	(10,788)	(26)	—	—
from Stage 2 to Stage 1	10,803	(10,803)	—	—	—
from Stage 3 to Stage 2	—	15	(15)	—	—
from Stage 3 to Stage 1	11	—	(11)	—	—
Increase reported directly in equity in gross carrying amounts					
for interest claims not recognised in profit or loss	—	—	39	—	39
Changes due to modification of assets not leading to derecognition	—	—	—	—	—
Derecognition	(16,466)	(2,359)	(342)	(10)	(19,177)
Foreign currency movements and other changes	39	6	(1)	—	44
Balance at 30/6/2021	**127,232**	**14,403**	**3,250**	**17**	**144,902**
Balance at 1/1/2020	**127,733**	**11,060**	**2,669**	**—**	**141,462**
Addition due to new business	34,074	3,766	1	26	37,867
Change in carrying amount within the stage	4,071	(1,495)	(322)	—	2,254
Transfers to another stage due to deterioration in credit quality	(18,051)	16,231	1,820	—	—
from Stage 1 to Stage 2	(17,161)	17,161	—	—	—
from Stage 2 to Stage 3	—	(930)	930	—	—
from Stage 1 to Stage 3	(890)	—	890	—	—
Transfer to another stage due to improvement in credit quality	3,663	(3,514)	(149)	—	—
from Stage 2 to Stage 1	3,624	(3,624)	—	—	—
from Stage 3 to Stage 2	—	110	(110)	—	—
from Stage 3 to Stage 1	39	—	(39)	—	—
Increase reported directly in equity in gross carrying amounts					
for interest claims not recognised in profit or loss	—	—	201	—	201
Changes due to modification of assets not leading to derecognition	—	—	—	—	—
Derecognition	(31,534)	(3,138)	(868)	(1)	(35,541)
Foreign currency movements and other changes	(53)	(7)	(28)	2	(86)
Balance at 31/12/2020	**119,903**	**22,903**	**3,324**	**27**	**146,157**

Changes in impairments (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2021	**112**	**447**	**1,351**	**—**	**1,910**
Addition due to new business	43	86	—	—	129
Change in carrying amount within the same stage	10	(22)	93	—	81
Transfers to another stage due to deterioration in credit quality	(14)	53	50	—	89
from Stage 1 to Stage 2	(14)	58	—	—	44
from Stage 2 to Stage 3	—	(5)	45	—	40
from Stage 1 to Stage 3	—	—	5	—	5
Transfers to another stage due to improvement in credit quality	19	(75)	(4)	—	(60)
from Stage 2 to Stage 1	19	(76)	—	—	(57)
from Stage 3 to Stage 2	—	1	(3)	—	(2)
from Stage 3 to Stage 1	—	—	(1)	—	(1)
Increase in impairment reported directly in equity for interest					
claims not recognised in profit or loss	—	—	39	—	39
Changes due to modification of assets not leading to derecognition	—	—	—	—	—
Disposals (reversal due to disposal of receivables)	(26)	(102)	(110)	—	(238)
Disposals (utilisation of impairments)	—	—	(58)	—	(58)
Reversal of the discounted amount and recognition of					
interest claims not previously recognised in profit or loss	—	—	(30)	—	(30)
Foreign currency movements and other changes	3	—	6	—	9
Balance at 30/6/2021	**147**	**387**	**1,337**	**—**	**1,871**
Balance at 1/1/2020	**139**	**237**	**1,454**	**—**	**1,830**
Addition due to new business	66	237	1	—	304
Change in carrying amount within the same stage	33	(2)	376	—	407
Transfers to another stage due to deterioration in credit quality	(116)	186	361	—	431
from Stage 1 to Stage 2	(110)	240	—	—	130
from Stage 2 to Stage 3	—	(54)	311	—	257
from Stage 1 to Stage 3	(6)	—	50	—	44
Transfers to another stage due to improvement in credit quality	75	(151)	(22)	—	(98)
from Stage 2 to Stage 1	71	(152)	—	—	(81)
from Stage 3 to Stage 2	—	1	(18)	—	(17)
from Stage 3 to Stage 1	4	—	(4)	—	—
Increase in impairment reported directly in equity for interest					
claims not recognised in profit or loss	—	—	201	—	201
Changes due to modification of assets not leading to derecognition	—	—	—	—	—
Disposals (reversal due to disposal of receivables)	(85)	(63)	(414)	—	(562)
Disposals (utilisation of impairments)	—	—	(461)	—	(461)
Reversal of the discounted amount and recognition of					
interest claims not previously recognised in profit or loss	—	—	(106)	—	(106)
Foreign currency movements and other changes	—	3	(39)	—	(36)
Balance at 31/12/2020	**112**	**447**	**1,351**	**—**	**1,910**

Notes to the Balance Sheet (Continued)

In the first half of 2021, portfolio valuation allowances (Stage 1 and Stage 2) fell slightly by €25 million from €559 million at year-end 2020. The adjustment of the assumptions used to reflect future economic conditions had a positive effect here, particularly the adjustment of the growth rates for the gross domestic product based on the economic recovery that is setting in. HVB Group expects the major economies to be on a path of solid growth for 2021 and beyond. A significant contributing factor was the adjustment of the growth rates for the annual real gross domestic product in the baseline scenario in Germany to 2.8% for 2021, 5.0% for 2022 and 2.2% for 2023 (assumptions as at 31 December 2020: 4.8% for 2021, 2.7% for 2022 and 2.2% for 2023). This effect was compensated for by introducing new PD models for retail and business customers. The key driver for adjusting PD values is the application of current times series and the new calibration to the average probability of default in the long term. The new PD models were introduced with the intention of determining the expected credit losses by applying scale factors; the new PD models are planned to be implemented in the lending process in the second half of 2021. Effects from changes in the amount of loans and receivables with customers, such as rating adjustments and transfers between Stages 1 and 2, have also cancelled each other out for the most part.

The effects of adjusting model parameters cannot be determined separately and are included in the changes in allowances shown. The net effect from the total amount of all allowances for loans and receivables with banks, loans and receivables with customers and provisions for contingent liabilities comes to €0.4 million.

In addition, there was a small reversal of specific valuation allowances of net €14 million, to €1,337 million, in the reporting period. Additions to specific valuation allowances on account of defaults were overcompensated by reversals of existing specific valuation allowances. The feared wave of defaults related to the COVID-19 pandemic has not occurred to date, partly as a result of an improved macroeconomic environment.

Loans and receivables with related parties

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

	30/6/2021	31/12/2020
Non-consolidated affiliates	47	42
of which:		
sister companies	37	41
subsidiaries	10	1
Joint ventures	—	—
Associates	49	51
Other investees	335	382
Total	**431**	**475**

25 Hedging derivatives

(€ millions)

	30/6/2021	31/12/2020
Micro fair value hedge	4	7
Portfolio fair value hedge[1]	236	365
Total	**240**	**372**

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

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

(€ millions)

	30/6/2021	31/12/2020
Associated companies accounted for using the equity method	12	11
of which: goodwill	—	—
Joint ventures accounted for using the equity method	—	—
Total	**12**	**11**

27 Property, plant and equipment

(€ millions)

	30/6/2021	31/12/2020
Land	1,061	1,045
Buildings	931	947
Plant and office equipment	244	263
Right-of-use assets (leases)	251	270
of which: land and buildings	241	260
Other property, plant and equipment	—	—
Total	**2,487**	**2,525**

Changes in property, plant and equipment

(€ millions)

	LAND	BUILDINGS	PLANT AND OFFICE EQUIPMENT	RIGHT-OF-USE ASSETS (LEASES)	TOTAL INTERNALLY USED PROPERTY, PLANT AND EQUIPMENT	OTHER PROPERTY, PLANT AND EQUIPMENT	TOTAL PROPERTY, PLANT AND EQUIPMENT[1]
Acquisition costs 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 at 1/1/2021	**1,045**	**947**	**263**	**270**	**2,525**	**—**	**2,525**
Additions							
Acquisition/production costs	—	14	4	7	25	—	25
Adjustment due to revaluation in reporting							
period (OCI)	48	19	—	—	67	—	67
Write-ups	—	7	—	—	7	—	7
Changes from currency translation	—	—	—	2	2	—	2
Other additions[2]	1	—	1	—	2	—	2
Disposals							
Sales	(1)	(3)	(3)	(1)	(8)	—	(8)
Adjustment due to revaluation in reporting							
period (OCI)	(31)	(31)	—	—	(62)	—	(62)
Depreciation and write-downs	—	(16)	(20)	(25)	(61)	—	(61)
Impairments	—	(3)	—	—	(3)	—	(3)
Changes from currency translation	—	—	—	—	—	—	—
Non-current assets or disposal groups held for sale	—	—	—	—	—	—	—
Other disposals[2]	(1)	(3)	(1)	(2)	(7)	—	(7)
Carrying amounts at 30/6/2021	**1,061**	**931**	**244**	**251**	**2,487**	**—**	**2,487**
Write-downs and write-ups from previous years							
plus the reporting period	—	1,536	515	113	2,164	—	2,164
Acquisition costs at 30/6/2021	**1,061**	**2,467**	**759**	**364**	**4,651**	**—**	**4,651**

Notes to the Balance Sheet (Continued)

Changes in property, plant and equipment

(€ millions)

	LAND	BUILDINGS	PLANT AND OFFICE EQUIPMENT	RIGHT-OF-USE ASSETS (LEASES)	TOTAL INTERNALLY USED PROPERTY, PLANT AND EQUIPMENT	OTHER PROPERTY, PLANT AND EQUIPMENT	TOTAL PROPERTY, PLANT AND EQUIPMENT[1]
Acquisition costs at 1/1/2020 (before adjustment)	**121**	**1,463**	**861**	**352**	**2,797**	**—**	**2,797**
Adjustment due to change to revaluation model	830	981	—	—	1,811	—	1,811
Acquisition costs at 1/1/2020 (after adjustment)	**951**	**2,444**	**861**	**352**	**4,608**	**—**	**4,608**
Write-downs and write-ups from previous years							
(before adjustment)	—	(886)	(554)	(67)	(1,507)	—	(1,507)
Adjustment due to change to revaluation model	—	(594)	—	—	(594)	—	(594)
Write-downs and write ups from previous years							
(after adjustment)	—	(1,480)	(554)	(67)	(2,101)	—	(2,101)
Carrying amounts at 1/1/2020	**951**	**964**	**307**	**285**	**2,507**	**—**	**2,507**
Additions							
Acquisition/production costs	—	28	36	53	117	—	117
Adjustment due to revaluation in reporting							
period (OCI)	96	37	—	—	133	—	133
Write-ups	—	23	1	8	32	—	32
Changes from currency translation	—	—	—	—	—	—	—
Other additions[2]	2	2	2	9	15	—	15
Disposals							
Sales	—	(1)	(10)	(19)	(30)	—	(30)
Adjustment due to revaluation in reporting							
period (OCI)	(4)	(54)	—	—	(58)	—	(58)
Depreciation and write-downs	—	(32)	(43)	(49)	(124)	—	(124)
Impairments	—	(18)	(3)	(2)	(23)	—	(23)
Changes from currency translation	—	—	—	(4)	(4)	—	(4)
Non-current assets or disposal groups held for sale	—	—	—	—	—	—	—
Other disposals[2]	—	(2)	(27)	(11)	(40)	—	(40)
Carrying amounts at 31/12/2020	**1,045**	**947**	**263**	**270**	**2,525**	**—**	**2,525**
Write-downs and write-ups from previous years							
plus the reporting period	—	1,607	502	88	2,197	—	2,197
Acquisition costs at 31/12/2020	**1,045**	**2,554**	**765**	**358**	**4,722**	**—**	**4,722**

1 Including leased assets.
2 Including changes in the group of companies included in consolidation.

28 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 €69 million at the reporting date (previous year: €67 million).

Changes in investment properties (€ millions)

	2021	2020
Carrying amounts at 1/1	**352**	**353**
Additions		
Acquisitions	1	29
Valuation gains	24	43
Subsequent expenses	—	—
Changes from currency translation	—	—
Other additions[1]	—	1
Disposals		
Sales	(1)	(2)
Valuation losses	(11)	(26)
Changes from currency translation	—	—
Non-current assets or disposal groups held for sale	—	(46)
Other disposals[1]	(10)	—
Carrying amounts at 30/6/2021/31/12/2020	**355**	**352**

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

29 Intangible assets

(€ millions)

	30/6/2021	31/12/2020
Goodwill	—	—
Other intangible assets	9	8
Internally generated intangible assets	7	6
Other intangible assets	2	2
Total	**9**	**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.

Notes to the Balance Sheet (Continued)

30 Non-current assets or disposal groups held for sale

(€ millions)

	30/6/2021	31/12/2020
Cash and cash balances	—	—
Financial assets at FVTPL	195	179
Financial assets at FVTOCI	—	—
Loans and receivables with banks (at cost)	3	9
Loans and receivables with customers (at cost)	211	188
Investments in associates and joint ventures accounted for using the equity method	—	—
Property, plant and equipment	2	2
Investment properties	23	47
Intangible assets	4	3
Tax assets	9	12
Inventories (IAS 2)	113	292
Other assets	49	46
Total	**609**	**778**

As at 30 June 2021, non-current assets or disposal groups held for sale are related to the sale of the subsidiary Wealth Management Capital Holding GmbH, Munich, planned for the second half of 2021, which was already classified as non-current assets or disposal groups held for sale as at 31 December 2020. Minority interests in placed real asset funds are recognised under financial assets at FVTPL. 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 inventory assets. The decline in inventory assets in the first half of 2021 totalling €179 million is attributable to the contribution of real estate to funds that were placed with investors. 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.

The three non-strategic properties (investment properties, allocated to Level 2) amounting to €24 million classified as non-current assets or disposal groups held for sale in the previous year were sold in the first half of 2021.

No impairments were required to be recognised in connection with non-current assets or disposal groups held for sale for the first time as at 30 June 2021 or in the previous year.

Fair value level hierarchy

Assets or liabilities whose valuation is derived from directly observable (prices) or indirectly observable (derived from prices) input data (valuation parameters) are generally shown in Level 2. No price can be observed on an active market for the assets or liabilities concerned themselves. As real estate represents a unique item, no trading is conducted in the same property. Nor is there an observable price available on an active market. However, offers submitted within the scope of a selling process constitute observable input data for a fair value calculation, 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 (non-observable input data). External valuation reports are based on generally recognised valuation procedures that refer to parameters for the property that are determined by external assessors (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:

(€ millions)

	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)	
	30/06/2021	31/12/2020	30/06/2021	31/12/2020
Investment properties, classified as non-current assets or disposal groups held for sale	—	24	23	23

Changes in investment properties allocated to Level 3:

(€ millions)

	2021	2020
Carrying amount at 1/1	**23**	**—**
Additions to the portfolio (classified as Level 3)	—	23
Additions due to reclassification from Level 2 to Level 3	—	—
Disposals from the portfolio (classified as Level 3)	—	—
Disposals due to reclassification from Level 3 to Level 2	—	—
Carrying amount at 30/6/2021/31/12/2020	**23**	**23**

There were no reclassifications from Level 2 to Level 3.

Notes to the Balance Sheet (Continued)

31 Other assets

Other assets include prepaid expenses of €127 million (previous year: €123 million).

32 Deposits from banks

(€ millions)

	30/6/2021	31/12/2020
Deposits from central banks	34,894	28,333
Deposits from banks	43,509	45,174
Current accounts	2,140	2,088
Cash collateral and pledged credit balances	9,379	9,964
Repos	12,868	15,987
Term deposits	3,667	2,781
Other liabilities	15,455	14,354
Total	**78,403**	**73,507**

Deposits from central banks were affected by the participation in the TLTRO III programme in the amount of €32.2 billion at 30 June 2021. After borrowing funds of €25.7 billion in the first half of 2020, HVB borrowed a further €5.9 billion in a new tranche in the first half of 2021.

Amounts owed to related parties

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

(€ millions)

	30/6/2021	31/12/2020
Non-consolidated affiliates	3,776	4,951
of which:		
UniCredit S.p.A.	1,412	2,200
sister companies[1]	2,364	2,751
Joint ventures	—	—
Associates	153	189
Other investees	18	18
Total	**3,947**	**5,158**

1 Largest single items relate to UniCredit Bank Austria AG.

33 Deposits from customers

(€ millions)

	30/6/2021	31/12/2020
Current accounts	98,457	93,227
Cash collateral and pledged credit balances	6,099	7,720
Savings deposits	14,188	13,573
Repos	2,406	9,024
Term deposits	12,801	17,448
Promissory notes	1,200	1,273
Lease liabilities	462	496
Other liabilities	1,367	1,042
Total	**136,980**	**143,803**

Amounts owed to related parties

The item “Deposits from customers” includes the following amounts attributable to related parties:

(€ millions)

	30/6/2021	31/12/2020
Non-consolidated affiliates	230	312
of which:		
sister companies	206	309
subsidiaries	24	3
Joint ventures	2	3
Associates	1	1
Other investees	409	264
Total	**642**	**580**

Notes to the Balance Sheet (Continued)

34 Debt securities in issue

(€ millions)

	30/6/2021	31/12/2020
Bonds	31,923	28,963
of which:		
registered Mortgage Pfandbriefe	3,928	4,272
registered Public-sector Pfandbriefe	1,986	2,041
Mortgage Pfandbriefe	15,245	14,543
Public-sector Pfandbriefe	715	697
registered bonds	3,075	4,616
Other securities	317	2,780
Total	**32,240**	**31,743**

Debt securities in issue, payable to related parties

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

(€ millions)

	30/6/2021	31/12/2020
Non-consolidated affiliates	2,828	1,814
of which:		
UniCredit S.p.A.	2,828	1,814
sister companies	—	—
Joint ventures	—	—
Associates	—	—
Other investees	2	—
Total	**2,830**	**1,814**

35 Financial liabilities held for trading

(€ millions)

	30/6/2021	31/12/2020
Negative fair values arising from derivative financial instruments	42,801	47,647
Other financial liabilities held for trading	12,846	9,304
Total	**55,647**	**56,951**

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.

36 Financial liabilities at FVTPL

The item primarily contains own structured issues of €5,726 million (previous year: €5,736 million).

37 Hedging derivatives

(€ millions)

	30/6/2021	31/12/2020
Micro fair value hedge	261	348
Portfolio fair value hedge[1]	291	386
Total	**552**	**734**

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

38 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 €1,305 million net (previous year: €1,941 million). The fair value of the netted portfolio fair value hedge derivatives represents a net comparable amount resulting from a countermovement.

39 Liabilities of disposal groups held for sale

(€ millions)

	30/6/2021	31/12/2020
Deposits from banks	74	146
Deposits from customers	346	311
Tax liabilities	9	8
Other liabilities	122	160
Provisions	2	6
Total	**553**	**631**

At 30 June 2021, the liabilities of disposal groups held for sale relate exclusively and at 31 December 2020 almost exclusively to the liabilities of Wealth Management Capital Holding GmbH, Munich and its consolidated subsidiaries.

40 Provisions

(€ millions)

	30/6/2021	31/12/2020
Provisions for pensions and similar obligations	1,105	1,387
Allowances for losses on guarantees and commitments and irrevocable credit commitments	403	432
Restructuring provisions	249	288
Other provisions	840	716
Payroll provisions	334	341
Provisions related to tax disputes (without income taxes)	34	34
Provisions for rental guarantees and dismantling obligations	98	98
Provisions for legal risks and similar	231	150
Other provisions	143	93
Total	**2,597**	**2,823**

Provisions for pensions and similar obligations

As at 30 June 2021, the provisions for pensions and similar obligations were remeasured on the basis of updated actuarial assumptions and market values of the plan assets. Compared with year-end 2020, pension provisions recognised in the consolidated balance sheet have decreased by €282 million (down 20.3%) to €1,105 million. The recognised pension provisions thus correspond to the net defined benefit liability from the defined benefit plans, resulting from netting the present value of the defined benefit obligation (DBO) of €5,565 million with the fair value of the plan assets of €4,460 million.

The key reason for the decrease in the pension provisions was the increase by 35 basis points of the discount rate (weighted average) to 1.20% (31 December 2020: 0.85%) due to the capital market performance in the first half of 2021. A higher discount rate results in stronger discounting of the liabilities from the defined benefit obligations and hence to a decrease in the present value of liability.

The actuarial profits on 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 €314 million, which was recognised immediately in shareholders' equity without affecting profit or loss and in other comprehensive income (OCI) within total comprehensive income.

Notes to the Balance Sheet (Continued)

41 Subordinated capital

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

(€ millions)

	30/6/2021	31/12/2020
Subordinated liabilities	1,208	1,193
Hybrid capital instruments	1,752	1,750
Total	**2,960**	**2,943**

In October 2020, HVB issued regulatory own funds in the form of two **additional Tier 1 issues (AT1 bonds),** which were fully subscribed by UniCredit S.p.A. The Bank is optimising its capital structure with the issues, also against the backdrop of the changes in regulatory requirements by the European Banking Authority (EBA). The AT1 bonds meet the criteria set out in the Capital Requirements Regulation (CRR II) and can be used to meet MREL requirements (SRMR II).

The AT1 bonds, which have a volume of €1,000 million and €700 million and an indefinite term, are unsecured and subordinate. AT1 bonds can only be terminated by the issuer. As the issuer, HVB has the right to waive interest in whole or in part at its own discretion. The bond terms stipulate a temporary write-down in the event that the Bank’s CET 1 ratio falls below the 5.125% mark on a stand-alone basis or consolidated basis pursuant to the CRR. Under certain conditions, a (re-)write-up is possible at HVB’s discretion.

In addition, the issues have the following features:
– The issue of €1,000 million can be called in for the first time after five years and initially bears 5.794% interest per annum for five years; from 20 October 2025 the interest rate corresponds to the 5-year EUR mid-market swap rate of +6.250% per annum until the next interest rate adjustment date after five years.
– The issue of €700 million can be called in for the first time after six years and initially bears 5.928% interest per annum for six years; from 20 October 2026 the interest rate corresponds to the 5-year EUR mid-market swap rate of +6.350% per annum until the next interest rate adjustment date after five years.

At the end of June 2020, HVB issued regulatory own funds in the form of a **Tier 2 capital bond (Tier 2 bond),** which was fully subscribed by UniCredit S.p.A. With this issue, the Bank is optimising its capital structure, also against the backdrop of the changing regulatory requirements of the European Banking Authority (EBA). The subordinated bond fulfils the requirements for Tier 2 capital specified in the Capital Requirements Regulation (CRR II) and can also be included to fulfil the MREL requirements (SRMR II).

The subordinated bond has a volume of €800 million and a maturity of ten years with a call provision after five years. The bond has a fixed interest rate of 3.469% per annum for the first five years, which is re-determined after five years based on the valid five-year swap rate plus a 380-basis-point spread, as long as the bond has not been paid back after five years. The conditions at the time of issuance (at arm’s length) are in line with the market.

Other Information

42 Events after the reporting period

At HVB Group there were no noteworthy events after 30 June 2021.

43 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 €318 million (previous year: €1,099 million) were transferred between Level 1 and Level 2. At the same time, financial assets or liabilities of €1,878 million (previous year: €2,250 million) were transferred between Level 2 and Level 1. Most of the transfers relate to securities and result from 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:

(€ millions)

		TO LEVEL 1	TO LEVEL 2
Financial assets held for trading			
	Transfer from Level 1	—	37
	Transfer from Level 2	145	—
Financial assets at FVTPL			
	Transfer from Level 1	—	155
	Transfer from Level 2	1,082	—
Financial assets at FVTOCI			
	Transfer from Level 1	—	74
	Transfer from Level 2	647	—
Financial liabilities held for trading			
	Transfer from Level 1	—	52
	Transfer from Level 2	4	—
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 30 June 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 each product type, broken down by the individual classes of financial instrument. 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 – 116bps
Equities	Market approach	Price	0% – 3%
Asset-backed securities (ABS)	DCF method	Credit spread curves	30bps – 958bps
		Residual value	0% – 26.63%
		Default rate	0% – 1.17%
		Prepayment rate	0% – 6.4%
Commodity/equity derivatives	Option price model	Commodity price volatility/equity volatility	2% – 19%
		Correlation between commodity/equities	2% – 24%
	DCF method	Dividend yields	1% – 11%
Interest rate derivatives	DCF method	Swap interest rate	0bps – 129bps
		Inflation swap interest rate	3bps – 12bps
	Option price model	Inflation volatility	1% – 3%
		Interest rate volatility	0% – 29%
		Correlation between interest rates	0% – 20%
Credit derivatives	Hazard rate model	Credit spread curves	1bps – 35bps
		Residual value	0% – 5%
Currency derivatives	DCF method	Yield curves	0bps – 129bps
	Option price model	FX volatility	0% – 51%

The impact of changing possible appropriate alternative parameter values on the fair value of the financial instruments classified as Level 3 is shown in the sensitivity analysis presented below. 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 €36 million respectively at the reporting date (previous year: a plus or minus of €32 million respectively).

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

(€ millions)

	30/6/2021		31/12/2020	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
Fixed-income securities and other debt instruments	1	(1)	—	—
Equities	—	—	—	—
Asset-backed securities	—	—	—	—
Commodity/equity derivatives	32	(32)	29	(29)
Interest rate derivatives	1	(1)	—	—
Credit derivatives	2	(2)	3	(3)
Currency derivatives	—	—	—	—
Total	**36**	**(36)**	**32**	**(32)**

For fixed-income securities and other debt instruments as well as asset-backed securities, the credit spread curves were varied as part 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 significant 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:

(€ millions)

	2021	2020
Balance at 1/1	**18**	**14**
New trades during the period	14	14
Write-downs	2	4
Expired trades	—	1
Retroactive change in observability	11	5
Exchange rate changes	—	—
Balance at 30/6/2021/31/12/2020	**19**	**18**

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

(€ millions)

	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	25,553	19,406	58,905	61,979	1,150	1,320
of which derivatives	5,520	4,058	42,145	51,702	500	592
Financial assets at FVTPL	5,073	5,560	3,953	5,563	745	321
Financial assets at FVTOCI	11,241	10,243	1,631	2,228	—	—
Hedging derivatives	—	—	240	372	—	—
Financial liabilities recognised in the						
balance sheet at fair value						
Financial liabilities held for trading	11,014	8,004	43,711	48,044	922	903
of which derivatives	6,684	4,717	35,606	42,442	511	488
Financial liabilities at FVTPL	—	—	5,429	5,375	297	361
Hedging derivatives	—	—	552	734	—	—

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

	FINANCIAL ASSETS HELD FOR TRADING	FINANCIAL ASSETS AT FVTPL	FINANCIAL ASSETS AT FVTOCI	HEDGING DERIVATIVES
Balance at 1/1/2021	**1,320**	**321**	**—**	**—**
Additions				
Purchases	193	420	—	—
Realised gains[1]	19	16	—	—
Transfer from other levels	2	9	—	—
Other additions[2]	32	15	—	—
Disposals				
Sales	(223)	(27)	—	—
Repayment	—	(1)	—	—
Realised losses[1]	(96)	(4)	—	—
Transfer to other levels	(79)	(3)	—	—
Other disposals	(18)	(1)	—	—
Balance at 30/6/2021	**1,150**	**745**	**—**	**—**
Balance at 1/1/2020	**1,226**	**945**	**—**	**—**
Additions				
Purchases	590	128	—	—
Realised gains[1]	35	46	—	—
Transfer from other levels	24	—	—	—
Other additions[2]	25	13	—	—
Disposals				
Sales	(449)	(568)	—	—
Repayment	—	(2)	—	—
Realised losses[1]	(31)	(43)	—	—
Transfer to other levels	(60)	(9)	—	—
Other disposals	(40)	(189)	—	—
Balance at 31/12/2020	**1,320**	**321**	**—**	**—**

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

The additions and disposals from purchases and sales in financial assets held for trading are due in particular to novations in equity derivatives. The additions from purchases in financial assets at FVTPL are primarily attributable to the extension of syndicated loans.

Other Information (Continued)

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

	FINANCIAL LIABILITIES HELD FOR TRADING		FINANCIAL LIABILITIES AT FVTPL		HEDGING DERIVATIVES	
	2021	2020	2021	2020	2021	2020
Balance at 1/1	**903**	**839**	**361**	**332**	**—**	**—**
Additions						
Sales	47	158	—	—	—	—
Issues	161	155	91	172	—	—
Realised losses[1]	128	88	17	16	—	—
Transfer from other levels	52	63	2	31	—	—
Other additions[2]	37	19	4	4	—	—
Disposals						
Buy-back	(131)	(117)	(32)	(32)	—	—
Repayment	—	(23)	—	(80)	—	—
Realised gains[1]	(49)	(90)	(15)	(24)	—	—
Transfer to other levels	(220)	(174)	(128)	(52)	—	—
Other disposals	(6)	(15)	(3)	(6)	—	—
Balance at 30/6/2021/31/12/2020	**922**	**903**	**297**	**361**	**—**	**—**

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

Most of the additions can be attributed to structured issues and certificates as well as to the conclusion of equity-, commodity- and credit-linked derivatives. The transfers to other levels are primarily due to the improved observability of market liquidity of the instruments underlying structured derivatives (equity-, commodity- and credit-linked) and equity- and credit-linked issues.

44 Fair values of financial instruments compliant with IFRS 7

The fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is assumed in this context that the transaction takes place on the principal market for the instrument or the most advantageous market to which the Bank has access.

The calculation of the fair value for performing loans is explained to begin with. The fair value of loans is calculated as the sum total of the discounted, risk-adjusted anticipated cash flows discounted on the basis of the swap curve. Cash flows are determined on the basis of the conditions of the loan agreement (interest and redemption), whereby rights of termination are taken into account. In this context, the anticipated, risk-adjusted cash flows are based on the survival probability and the loss given default. The survival probability is determined on the basis of the risk-neutral probability of default, while the proceeds upon realisation are determined on the basis of the internal loss given default parameters. The risk-neutral probability of default is determined for the first time in 2021 on the basis of the internally calculated multi-year probability of default covering the lifetime of the financial instrument (as real-world probability of default), the market risk premium and the correlation between the respective loan and the general market risk. In the previous year, the internal one-year default rate was used as the real-world probability of default; the effects from the change are not material. The market risk premium represents a factor used to cover the difference between the real-world probability of default and the market's return expectations for the risk assumed. The loan portfolio is divided into five sectors (sovereign loans, loans to banks, corporate loans, syndicated loans and retail loans) in order to take account of the specific features of each sector. For each of these sectors with exception of retail loans, first of all the market risk premium is determined on the basis of a portfolio of specific, liquid CDS prices for the respective sector. Only for retail loans is the market risk premium derived from the market risk premiums for the other sectors due to the lack of a CDS market (except for syndicated loans). Furthermore, the fair value calculated by the model is calibrated in order to take account of the difference between this value and the fair value upon addition. This is in line with the assumption based on IFRS 13.58 according to which the transaction price reflects the fair value.

The proceeds upon realisation estimated by the Bank are taken as a basis to determine the fair value of non-performing loans. These already take account of the expected credit default. The maturities of the expected proceeds upon realisation are determined using model assumptions. These cash flows are discounted at a market interest rate in order to establish the fair value.

The fair value calculation for loans and receivables is built around the risk-neutral credit spread, which takes account of all relevant factors on the market. Further parameters besides the risk-neutral credit spread and the risk-free return on investment are not included. Provided the markets are liquid and no relevant market disruptions are evident, as is currently the case, the arbitrage between the markets on which credit risks are traded leads to a narrowing of the credit spreads. Accordingly, the CDS market is defined as the relevant exit market for loans and receivables. Otherwise, the parameters used to determine the real-world probability of default (PD) and loss given default (LGD) are determined on the basis of internal procedures.

Levels are allocated based on a sensitivity analysis for which a range is determined, when calculating the respective fair value, for the internal parameters within which the internal parameters may fluctuate based on realistic assumptions. To date, in order to calculate the sensitivity, the internal parameter was replaced with the value with the highest deviation in the estimated range, and based on that figure the fair value was recalculated. As long as the deviation of the fair value determined using this method is not significant compared with the originally determined fair value, the financial instrument is allocated to Level 2; otherwise, it is allocated to Level 3.

Other Information (Continued)

In the first half of 2021, HVB Group made the following adjustment in order to improve the methods used for deriving the fair value level for loans: a specific adjustment of the parameters is now simulated (shift under a stress scenario) for the valuation parameters relating to credit risk (e.g. PD, LGD, etc.) and the effects on the fair value are analysed. If the change in the valuation parameters for credit risk result in a significant change in the fair value, the loan concerned is allocated to Level 3 as the valuation parameters used for mapping credit risk are essentially not based on or derived from prices observable on the market. In the course of the adjustment, the accuracy of the calculation itself was also improved. As a result, this has led to a significant €23 billion decrease in fair value of loans classified as Level 2 while the fair values of loans classified as Level 3 increased accordingly.

Investments in joint ventures and associates are accounted for using the equity method, provided they are not of minor significance. Investments in non-consolidated companies and listed companies not accounted for using the equity method are normally carried at their fair value.

Quoted market prices are used for securities and derivatives traded on an exchange as well as for listed debt instruments. These instruments are allocated to Level 1. The fair value of the remaining securities is calculated as the net present value of anticipated future cash flows. The methods used to determine the fair value levels as described in the Note “Fair value hierarchy” are employed for this purpose.

The fair values of single-currency and cross-currency swaps and interest rate futures are calculated on the basis of discounted, anticipated future cash flows. In doing so, we apply the market rates applicable for the remaining maturity of the financial instruments. The fair value of forward exchange transactions is computed on the basis of current forward rates. Options are valued using price quotations or generally accepted models used to calculate the price of options. The common Black & Scholes model and the Bachelier model are used to value simple European options. In the case of more complex instruments, the interest is simulated using term-structure models with the current interest rate structure as well as caps and swaption volatilities as parameters relevant for valuation. The disbursement structure of the equities or indexes for the complex instruments is valued using either Black & Scholes or a stochastic volatility model with equity prices, volatilities, correlations and dividend expectations as parameters. The methods used to determine the fair value levels described in the Note “Fair value hierarchy” are employed for this purpose.

Please refer to the Note “Fair value hierarchy” for a description of the methods used to determine the fair value levels for unlisted derivatives.

The anticipated future cash flows of the liabilities (deposits from banks and customers, and debt securities in issue, provided these are not listed) are discounted to the present value using current interest rates taking into account internally determined funding premiums. The funding premiums correspond to the parameters that the Bank uses when setting the prices for its own issues. These funding premiums represent internally determined parameters that are essential for the determination of the fair value; the other liabilities are allocated to Level 3 accordingly.

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

(€ billions)

	CARRYING AMOUNT		FAIR VALUE	
ASSETS	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Cash and cash balances	47.5	47.5	47.5	47.5
Financial assets held for trading	85.6	82.7	85.6	82.7
Financial assets at FVTPL	9.8	11.4	9.8	11.4
Financial assets at FVTOCI	12.9	12.5	12.9	12.5
Loans and receivables with banks (at cost)	29.8	34.0	30.0	34.3
Loans and receivables with customers (at cost)	143.0	144.2	149.5	154.4
of which finance leases	1.3	1.6	1.3	1.6
Hedging derivatives	0.2	0.4	0.2	0.4
Total	**328.8**	**332.7**	**335.5**	**343.2**

(€ billions)

ASSETS	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 not carried at						
fair value in the balance sheet						
Cash and cash balances	—	—	47.5	47.5	—	—
Loans and receivables with banks (at cost)	1.7	1.4	26.0	31.0	2.3	1.9
Loans and receivables with customers (at cost)	11.1	10.2	63.9	65.2	74.5	79.0
of which finance leases	—	—	—	—	1.3	1.6

(€ billions)

LIABILITIES	CARRYING AMOUNT		FAIR VALUE	
	30/6/2021	31/12/2020	30/6/2021	31/12/2020
Deposits from banks	78.4	73.5	78.2	73.9
Deposits from customers	137.0	143.8	137.9	145.5
Debt securities in issue	32.2	31.7	34.8	34.1
Financial liabilities held for trading	55.6	57.0	55.6	57.0
Financial liabilities at FVTPL	5.7	5.7	5.7	5.7
Hedging derivatives	0.6	0.7	0.6	0.7
Total	**309.5**	**312.4**	**312.8**	**316.9**

(€ billions)

LIABILITIES	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 liabilities not carried at fair value						
in the balance sheet						
Deposits from banks	—	—	73.5	62.0	4.7	11.9
Deposits from customers	—	—	132.9	138.8	5.0	6.7
Debt securities in issue	14.0	12.9	6.9	7.0	13.9	14.2

The difference in HVB Group between the fair values and carrying amounts totals €6.7 billion (previous year: €10.5 billion) for assets and €3.3 billion (previous year: €4.5 billion) for liabilities. The net balance of these amounts is €3.4 billion (previous year: €6.0 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.

Other Information (Continued)

45 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)

				AMOUNTS NOT RECOGNISED			
	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]	82,960	(34,555)	48,405	(28,254)	(102)	(10,377)	9,672
Reverse repos[2]	29,291	(4,861)	24,430	—	(23,704)	—	726
Loans and receivables[3]	85,157	(6,149)	79,008	—	—	—	79,008
Total at 30/6/2021	**197,408**	**(45,565)**	**151,843**	**(28,254)**	**(23,806)**	**(10,377)**	**89,406**
Derivatives[1]	99,606	(42,882)	56,724	(32,078)	(170)	(13,363)	11,113
Reverse repos[2]	30,759	(2,050)	28,709	—	(27,834)	—	875
Loans and receivables[3]	85,441	(6,129)	79,312	—	—	—	79,312
Total at 31/12/2020	**215,806**	**(51,061)**	**164,745**	**(32,078)**	**(28,004)**	**(13,363)**	**91,300**

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 €6,426 million (previous year: €4,643 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)

				AMOUNTS NOT RECOGNISED			
	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]	82,579	(39,226)	43,353	(28,254)	(556)	(7,929)	6,614
Reverse repos[2]	26,194	(4,861)	21,333	—	(21,218)	—	115
Liabilities[3]	134,375	(1,478)	132,897	—	—	—	132,897
Total at 30/6/2021	**243,148**	**(45,565)**	**197,583**	**(28,254)**	**(21,774)**	**(7,929)**	**139,626**
Derivatives[1]	95,015	(46,634)	48,381	(32,079)	(592)	(10,887)	4,823
Reverse repos[2]	29,770	(2,050)	27,720	—	(27,465)	—	—
Liabilities[3]	130,771	(2,376)	128,395	—	—	—	128,395
Total at 31/12/2020	**255,556**	**(51,060)**	**204,496**	**(32,079)**	**(28,057)**	**(10,887)**	**133,218**

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 €4,658 million (previous year: €2,597 million).
3 Only relates to current accounts, cash collateral or pledged credit balances and other liabilities (including cumulative variation margins), as covered in the Notes “Deposits from banks” and “Deposits from customers”.

Compliant with IAS 32.42, financial assets and liabilities with the same counterparty are to be netted and the net amount recognised in the balance sheet if such netting of the amounts recognised at the present date is legally enforceable and the intention is to settle on a net basis during the normal course of business or to realise the asset and settle the liability simultaneously. The tables show a reconciliation from the gross amounts prior to netting via the offset amounts to the net amounts after netting for these offsets in the balance sheet. At HVB Group, the offsets in the balance sheet relate to transactions with central counterparties (CCPs), i.e. OTC derivatives (offsetting of the balancing positive and negative fair values 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 offsetting 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 netting 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 arising from cash collateral provided can become a liability arising 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.

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

(€ millions)

	30/6/2021		31/12/2020	
	CARRYING AMOUNT	OF WHICH: TRANSFERRED AS COLLATERAL	CARRYING AMOUNT	OF WHICH: TRANSFERRED AS COLLATERAL
Financial assets held for trading	85,608	3,997	82,705	2,599
Financial assets at FVTPL	9,771	467	11,444	865
Financial assets at FVTOCI	12,872	1,553	12,471	2,069
Loans and receivables with banks (at cost)	29,848	14	33,973	11
Loans and receivables with customers (at cost)	143,031	1,402	144,247	875
Total	**281,130**	**7,433**	**284,840**	**6,419**

Other Information (Continued)

47 Contingent liabilities and other commitments

(€ millions)

	30/6/2021	30/12/2020
Contingent liabilities[1]	26,395	24,588
Guarantees and indemnities	26,395	24,588
Other commitments	57,612	60,689
Irrevocable credit commitments	57,599	60,674
Other commitments	13	15
Total	**84,007**	**85,277**

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

HVB Group has made use of the option to provide some of the annual contribution to the bank restructuring fund in the form of fully secured payment claims (irrevocable payment commitments) in accordance with Section 12 of the German Bank Restructuring Fund Act (Restrukturierungsfondsgesetz – RStruktFG). The cash collateral provided in this regard amounted to €104 million at the reporting date (previous year: €104 million). 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 at the reporting date (previous year: €39 million). No new irrevocable credit commitments were given in the reporting period.

Contingent liabilities payable to related parties

(€ millions)

	30/6/2021	31/12/2020
Non-consolidated affiliates	1,983	1,952
of which:		
UniCredit S.p.A.	1,155	1,163
sister companies	798	774
subsidiaries	30	15
Joint ventures	—	—
Associates	5	7
Other investees	54	47
Total	**2,042**	**2,006**

48 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 → Risk Report → "Risk types in detail" → "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 €251 million for these services in the reporting year (previous-year period: €251 million). This was offset by income of €12 million (previous-year period: €12 million) from services rendered and internal charges. Moreover, software products worth €1 million (previous-year period: €38 thousand) 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 €51 million for these services in the reporting year (previous-year period: €67 million).

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

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

	30/6/2021			31/12/2020		
	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ASSUMED	LIABILITIES	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ASSUMED	LIABILITIES
Members of the Management Board of UniCredit Bank AG	3,518	186	3,173	2,846	791	2,894
Members of the Supervisory Board of UniCredit Bank AG	—	—	1,022	—	—	1,080
Members of the Group Executive Management Committee[1]	—	—	—	—	—	442

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 Management 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 0.08% and 2.03% falling due in the period from 2021 to 2049.

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

Other Information (Continued)

49 Supervisory Board[1]

Gianpaolo Alessandro	**Chairman**
Florian Schwarz Dr Bernd Metzner	**Deputy Chairmen**
Olivier Khayat Prof Dr Annette G. Köhler Finja Kütz Dr Claudia Mayfeld Claudia Richter Thomas Schöner Oliver Skrbot Christian Staack Gregor Völkl	**Members**

1 As at 30 June 2021

50 Management Board[1]

Markus Beumer	**Commercial Banking Unternehmer Bank**
Dr Michael Diederich	**Spokesman of the Management Board Human Capital/Labour and Social Affairs**
Jörg Frischholz	**Commercial Banking Private Clients Bank**
Dr Jürgen Kullnigg	**Chief Risk Officer (CRO)**
Jan Kupfer	**Corporate & Investment Banking**
Simone Marcucci	**Chief Financial Officer (CFO)**
Boris Scukanec Hopinski	**Chief Operating Officer (COO)**

1 As at 30 June 2021

Munich, 2 August 2021

UniCredit Bank AG
The Management Board

Beumer

Dr Diederich

Frischholz

Dr Kullnigg

Kupfer

Marcucci

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 2021

UniCredit Bank AG
The Management Board

Beumer Dr Diederich Frischholz Dr Kullnigg

Kupfer Marcucci Scukanec Hopinski

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