Do the right thing!

2020

Annual Report

Banking that matters.

HypoVereinsbank
Member of UniCredit

Financial Highlights

Key performance indicators

	1/1–31/12/2020	1/1–31/12/2019
Net operating profit	€1,100m	€1,556m
Cost-income ratio (based on operating income)	60.5%	65.4%
Profit before tax	€1,072m	€1,361m
Consolidated profit	€668m	€828m
Earnings per share	€ 0.83	€ 1.01

Balance sheet figures/Key capital ratios

	31/12/2020	31/12/2019
Total assets	€338,124m	€303,598m
Shareholders' equity	€17,875m	€18,915m
Common Equity Tier 1 capital[1]	€15,122m	€14,987m
Core capital (Tier 1 capital)[1]	€16,822m	€14,987m
Risk-weighted assets (including equivalents for market risk and operational risk)	€80,637m	€85,455m
Common Equity Tier 1 capital ratio[1,2]	18.8%	17.5%
Core capital ratio (Tier 1 ratio)[1,2]	20.9%	17.5%
Leverage ratio in accordance with Commission Delegated Regulation[1,3]	4.9%	4.3%

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 31 December 2020 (in accordance with approved consolidated financial statements). Had the aforementioned article not been applied, the leverage ratio of HVB Group as at 31 December 2020 would amount to 4.4% (in accordance with approved consolidated financial statements).

	31/12/2020	31/12/2019
Employees (in FTEs)	12,074	12,194
Branch offices	480	498

Ratings

	LONG-TERM	SHORT-TERM	OUTLOOK		CHANGE/ CONFIRMATION
Fitch Ratings					
Bank Ratings					
Derivative Counterparty Rating	BBB+(dcr)	—	—		14/5/2020
Deposit Rating	BBB+	F2	—		14/5/2020
Issuer Default Rating	BBB	F2	negative		14/5/2020
Stand-alone Rating	—	—	—	bbb	14/5/2020
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/Senior Preferred Debt Issuance Programme	BBB+	F2	—		14/5/2020
Non-preferred Senior Unsecured Debt	BBB	—	—		14/5/2020
Subordinated Debt	BB+	—	—		14/5/2020
Issue Ratings (secured)					
Public Sector Covered Bonds	WD	—	—		22/12/2020
Mortgage Covered Bonds	WD	—	—		22/12/2020
Moody's					
Bank Ratings					
Counterparty Rating	A1	P-1	—		1/4/2020
Deposit Rating	A2	P-1	negative		1/4/2020
Issuer Rating	A2	—	negative		1/4/2020
Stand-alone Rating	—	—	—	baa2	1/4/2020
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/Senior Unsecured	A2	—	negative		1/4/2020
Non-preferred Senior Unsecured Debt/Junior Senior Unsecured	Baa3	—	—		1/4/2020
Subordinated debt	Baa3	—	—		1/4/2020
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	—		12/12/2019
Issuer Credit Rating	BBB+	A-2	negative		12/12/2019
Stand-alone Rating	—	—	—	bbb+	12/12/2019
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/Senior Unsecured	BBB+	—	—		12/12/2019
Non-preferred Senior Unsecured Debt/Senior Subordinated	BBB	—	—		12/12/2019
Subordinated debt	BBB–	—	—		12/12/2019

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Corporate structure

Legal corporate structure

UniCredit Bank AG (HVB), formerly Bayerische Hypo- und Vereinsbank Aktiengesellschaft headquartered in Munich, was formed in 1998 through the merger of Bayerische Vereinsbank Aktiengesellschaft and Bayerische Hypotheken- und Wechsel-Bank Aktiengesellschaft. It is the parent company of HVB Group. HVB has been an affiliate of UniCredit S.p.A., Milan, Italy (UniCredit), since November 2005 and hence a major part of the UniCredit corporate group as a subgroup.

Since the shares held by minority shareholders of HVB were transferred to UniCredit compliant with Section 327a of the German Stock Corporation Act (Aktiengesetz – AktG), as resolved at the Annual General Meeting of Shareholders in June 2007 and entered in the Commercial Register on 15 September 2008, UniCredit has held 100% of the share capital of HVB. Thus, trading in HVB shares officially ceased. As a capital market-oriented company, HVB remains listed on securities exchanges as an issuer of Pfandbriefe, bonds and certificates, among other things.

Organisation of management and control

Leadership function and Supervisory Board

The Management Board is the management body of HVB and consists of seven members. The Management Board is directly responsible for managing the Bank. It is obliged to act in the interests of the company and to sustainably increase its corporate value. Within the framework of its leadership function, it is responsible above all for corporate planning and strategic orientation, and for ensuring adequate risk management and risk control. The Management Board provides the Supervisory Board with reports at regular intervals, particularly on all issues relevant to corporate planning and strategic development, the course of business, the state of the Bank and its subsidiaries, including the risk situation, and significant compliance issues. The members of the Management Board are jointly responsible for managing the Bank and for the proper business organisation of HVB. The responsibilities of the Management Board of HVB are specified in a schedule of responsibility, which forms part of the Management Board's internal regulations. The Management Board's internal regulations also specify in particular the matters reserved for the Management Board and the requirements for adopting resolutions and the required majorities.

The Supervisory Board of HVB has twelve members and has an equal number of employee and shareholder representatives. The task of the Supervisory Board is to monitor and regularly advise the Management Board as it conducts its business. The Supervisory Board has adopted by-laws specifically defining the details of the work within the Supervisory Board, the creation of committees and their tasks, and the tasks of the Chairman of the Supervisory Board. In addition, the by-laws state that certain types of transactions require the approval of the Supervisory Board.

The following changes occurred in the reporting period:

Supervisory Board

At the Annual General Meeting of Shareholders of UniCredit Bank AG (HVB) on 23 June 2020 the Supervisory Board was newly elected as scheduled with effect from the end of that Annual General Meeting.

The following were elected as new members of the Supervisory Board (shareholder representatives) of HVB:

Ms Finja Kütz, Dr Claudia Mayfeld and Dr Bernd Metzner Furthermore, Mr Thomas Schöner was elected to the Supervisory Board as a new member in line with the provisions of the German Act on the Co-determination of Employees in a Cross-border Merger (Gesetz über die Mitbestimmung der Arbeitnehmer bei einer grenzüberschreitenden Verschmelzung – MgVG). His term of office also began on 23 June 2020 at the end of the Annual General Meeting.

Mr Paolo Cornetta, Dr Marita Kraemer, Mr Klaus-Peter Prinz and Dr Wolfgang Sprissler resigned from the Supervisory Board of HVB with effect from the end of the Annual General Meeting on 23 June 2020.

The previous Supervisory Board members Gianpaolo Alessandro, Olivier Khayat and Prof Dr Annette G. Köhler were re-elected for a further term of office.

In addition, Mr Florian Schwarz, Ms Claudia Richter, Mr Oliver Skrbot, Mr Christian Staack and Mr Gregor Völkl were re-elected for a further term of office in line with the provisions of MgVG.

Management Board

Dr Emanuele Buttà resigned from the Management Board with effect from the end of 14 April 2020. Mr Jörg Frischholz was appointed to the Management Board (Commercial Banking – Private Clients Bank) with effect from 15 April 2020. With effect from the end of 30 April 2020, Mr Guglielmo Zadra resigned from the Management Board. Mr Simone Marcucci was appointed a new member of the Management Board with effect from 1 May 2020 and is responsible as the new Chief Financial Officer (CFO). With effect from the end of 31 August 2020, Ms Sandra Betocchi Drwenski resigned from the Management Board and Mr Boris Scukanec Hopinski was newly appointed to the Management Board as the Chief Operating Officer (COO). With effect from the end of 31 October 2020, Ms Ljiljana Čortan resigned from the Management Board and with effect from 1 November 2020, Dr Jürgen Kullnigg was appointed to the Management Board and is responsible as the Chief Risk Officer (CRO).

A list showing the names of all of the members of the Management Board and the Supervisory Board of HVB is given in the Note "Members of the Supervisory Board" and the Note "Members of the Management Board" in the notes to the consolidated financial statements.

Non-financial reporting

In the context of transposing the Corporate Social Responsibility Directive into German law, certain large companies have been obliged to add a non-financial statement to their group management reports since the 2017 financial year. This non-financial reporting covers labour, social and environmental issues (sustainability), respect for human rights and anti-corruption. As a fully consolidated subgroup of the UniCredit corporate group, HVB Group abstains from publishing its own non-financial statement in accordance with Section 315b (2) of the German Commercial Code (Handelsgesetzbuch – HGB). The non-financial statement is issued, with a discharging effect for HVB, by our parent company, UniCredit S.p.A., Milan, and can be found on UniCredit's website under "A Sustainable Bank" (www.unicreditgroup.eu/en/a-sustainable-bank.html).

Overall bank management

HVB Group's objective is to generate a sustainable increase in corporate value. To take account of the need for value-based management, the principle of overall bank management is based on earnings, risk, liquidity and capital aspects. This principle is explained in more detail in the Risk Report (please refer in particular to "Overall bank management" within the section entitled "Implementation of overall bank management" in the Risk Report). The key performance indicators (KPIs) applied within the framework of HVB Group's overall bank management are stated at the relevant places in Management's Discussion and Analysis.

Business model, main products, sales markets, competitive position and locations in the 2020 financial year

HVB Group is part of UniCredit, a pan-European commercial bank with integrated corporate & investment banking. It offers its broad customer base a banking network across Western, Central and Eastern Europe that is both regional and international in focus. Its integration into UniCredit enables HVB Group to exploit its international network and economies of scale. UniCredit has a divisionally and regionally diversified business model. It provides its customers access to commercial banks in 13 countries and other offices worldwide.

As a universal bank, HVB with its subsidiaries is a provider of banking and financial services and focuses on Germany. It offers a comprehensive range of banking and financial products and services to retail, corporate and public sector customers, international companies and institutional customers. HVB Group has 480 offices around the world – 324 of which are HVB offices in Germany which have been adapted to changing customer behaviour in recent years. In addition to its branch network, customers are served irrespective of their location through its remote channels. For detailed information on the offices, please refer to the Note "Offices" in the notes to the consolidated financial statements.

Financial Review (Continued)

The business segments

HVB Group is divided into the following segments/business segments:
– Commercial Banking
– Corporate & Investment Banking (CIB)
– Group Corporate Centre
– Other

A detailed description of the individual segments/business segments, particularly regarding the customers allocated to them, the products and services offered, the organisational focus as well as the competitive situation and the locations is contained in the Note "Method of segment reporting by business segment" and the Note "Components of segment reporting by business segment" in the notes to the 2020 consolidated financial statements.

Team 23

Our four-year Team 23 strategic plan focuses on growth and accelerating our business activities, also in the current COVID-19 environment. We aim to increase and strengthen our customer base, drive forward productivity and expand our digitalisation activities. In doing so, we intend to deliver sustainable yields, operate reliably with integrity and deal responsibly with resources and the environment; we will also aim to do more than "business as usual". To underpin our growth, in the coming years we will be investing more than previously in further digitalisation, automation and end-to-end process optimisation. In addition, we will create growth opportunities through greater interaction between business segments and the standardisation of customer platforms. At the same time, a further adjustment of our staffing levels is planned. As in the past, we will also do this in the future through socially compatible measures, i.e. to a large extent via natural fluctuation and partial and early retirement solutions. Moreover, new employment prospects will be created by continuing to promote existing initiatives; severance packages will be concluded where this is not possible. An agreement to this effect was concluded between the senior management and the Central Works Council on 5 December 2019. Our 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.

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 2020 financial year.

Information on changes in the group of companies included in consolidation is provided in the Note "Companies included in consolidation" in the notes to the 2020 consolidated financial statements.

Economic report

Underlying economic conditions

According to the International Monetary Fund (IMF), global economic growth declined by 3.5 percent in 2020 compared with the previous year, although there were some differences between countries. One of the main reasons for the weaker global trend was the collapse in world trade. While the USA posted a significant fall in growth, an even sharper decline in growth was seen in the eurozone. In contrast to most countries, China recorded slight economic growth. Apart from monetary and fiscal policy measures, the rapid containment of the COVID-19 pandemic and the accompanying partial opening of the economy that followed particularly spurred China's GDP growth.

In 2020, real GDP growth in the USA declined by 3.5 percent (from plus 2.2 percent in the previous year according to the US Bureau of Economic Analysis (BEA)). After a sharp fall in economic output in the first half of 2020, triggered by massive job cuts in the labour market and a severe slump in private consumer spending in the course of the COVID-19 pandemic, the economy recovered somewhat in the second half of the year. The substantial government support of incomes at the beginning of the year including direct payments made to households coupled with a generous increase in unemployment benefits introduced by the CARES Act made a significant contribution to this recovery. On 3 November the democrat Joe Biden was declared the winner of the US presidential elections and at the end of December the US Congress reached an agreement on a new economic stimulus package intended to mitigate the impact of the COVID-19 pandemic with around 900 billion US dollars.

GDP also fell sharply in the eurozone by 6.8 percent in 2020 (The UniCredit Macro & Markets Weekly, "Draghi effect still has legs across assets", published on 12 February 2021). The declines in the countries most affected by the COVID-19 pandemic (such as France, Italy and Spain) had a particularly negative impact. Despite an economic recovery at the beginning of the second half of the year in many countries, triggered by a broad relaxation of restrictions as well as by monetary and fiscal policy support measures, new containment measures during a second wave of infections adversely affected growth in the fourth quarter. However, more differentiated measures to combat the COVID-19 pandemic meant that the decline in GDP was less pronounced this time than when the pandemic started in the spring. In addition, the manufacturing industry proved to be a supporting factor as it benefitted from pent-up demand for consumer durables after the first shutdown and a convincing economic recovery in China. In December 2020, the EU and the United Kingdom agreed on a joint trade agreement which prevented a no-deal Brexit.

In December 2020, the ECB announced further relaxation measures. The main focus of these measures was an increase in the existing pandemic emergency purchase programme (PEPP) and the preservation of favourable long-term refinancing conditions. In addition, the ECB called on banks to refrain from or limit the payment of dividends to external investors until the end of September 2021. The inflation rate in the eurozone rose to 0.3 percent for the whole of 2020 (according to Eurostat) and was thus below the ECB's target of close to but below 2.0 percent again in this reporting year.

At country level (data according to national statistical offices), the GDP in Germany fell by 5.0 percent in 2020 (2019: plus 0.6 percent), and in France economic activity in 2020 also fell by 8.3 percent (2019: plus 1.5 percent). Italy's economy contracted by 8.9 percent in 2020 compared with plus 0.3 percent in 2019. The economic recovery in Spain, which recorded growth of 2.0 percent in 2019, posted a decline of 11 percent in 2020.

The slump in German economic output in 2020 was primarily due to a noticeable decline in private consumer spending and exports. By contrast, the construction industry and government spending buoyed up economic activity. They allowed Germany to disengage to some extent from developments in other countries in the eurozone (such as France, Italy and Spain). This was possible in part because fewer business sectors were affected by the restrictive measures aimed at containing the COVID-19 pandemic and because the momentum in the manufacturing industry proved to be robust, particularly in the second half of the year. Fiscal measures, such as the temporary reduction in value added tax, also triggered a pull-forward effect in purchases of consumer durables.

Financial Review (Continued)

Sector-specific developments

The dominant theme in 2020 was the global COVID-19 pandemic. Since March 2020, measures for containing the virus have led to the most severe decline in economic output in Europe since the Second World War. In this context, the banking sector is seen as a key building block to overcoming the crisis, which is why one of the main goals of policymakers and banking supervisors was to encourage the banks' willingness to continue extending lines of credit to the real economy. This has led to a raft of monetary policy and regulatory support measures. Furthermore, national governments and European institutions launched economic stimulus measures and set up guarantee programmes with a focus on corporate lending. Statutory, banking industry-specific and bilateral payment moratoria were also set up for loan instalments. All of these measures had direct or indirect positive effects on the general conditions for banks and their lending activities. In the ECB Bank Lending Survey, it became apparent that on account of the support measures in the second quarter of 2020, the lending standards for companies did not become more stringent. Despite the severe economic contraction, there was no indication of any procyclical constraint to lending, especially on account of the government guarantee programmes. At 30 September 2020, some 7 percent of all corporate loans in the eurozone were already covered by a government guarantee. Lending standards became more stringent in the third and fourth quarter of 2020, driven by the risk assessment of banks and uncertainty about the phasing out of government support measures in 2021. The greater stringency was, however, significantly less pronounced than during the financial crisis from 2007 to 2009 or at the beginning of the sovereign debt crisis at the end of 2011, showing that the extensive measures were having a distinct effect.

In March 2020, the European Central Bank announced far-reaching monetary and regulatory measures. Ample liquidity was made available to banks (new longer-term refinancing operations (LTRO) programmes also in US dollars) and conditions were improved for the existing targeted longer-term refinancing operations (TLTRO III). The modifications benefitting banks included a higher TLTRO borrowing allowance, less stringent requirements for the credit growth target and an improvement of 25 basis points in the borrowing rate. In April, the ECB again lowered the TLTRO III conditions by an additional 25 basis points and introduced a new liquidity facility (the Pandemic Emergency LTRO, or PELTRO). Starting in May 2020, PELTROs can be drawn in seven tranches and will have maturity dates between July and September 2021. In June, banks took advantage of very attractive conditions to borrow a total of €1,308 billion of TLTRO III funds. Transitional LTROs and TLTRO II were rolled into TLTRO III and the additional net demand was €550 billion. In September 2020, banks borrowed further TLTRO III funds totalling €174 billion and €50 billion in December 2020. In 2021, further net borrowings are expected as in December the ECB further improved the TLTRO conditions. Among other things, the improved borrowing rate of 50 basis points below the interest rate on the deposit facility was extended by one year until June 2022 instead of until June 2021 and the maximum total amount that counterparties can borrow was increased by 10 percent.

In March, the ECB also decided to purchase €120 billion in assets by year-end 2020 in addition to the existing asset purchase programme (APP). The ECB also announced another temporary asset purchase programme under the name Pandemic Emergency Purchase Programme (PEPP) in March. The new programme will focus on government and private assets and was originally to have a total volume of €750 billion by the end of 2020. In June, the PEPP programme was expanded by a further €600 billion and in December by yet another €500 billion to a total amount of €1,850 billion. In addition, the ECB will reinvest all maturities in the PEPP programme until at least the end of 2023.

As an additional measure, the ECB approved a package of measures in April 2020 relating to the refinancing of commercial banks with the ECB, which was aimed at temporarily relaxing the criteria for collateral. This package of measures was designed to cushion the increasingly stringent lending conditions in the eurozone and led 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 comprehensive measures 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 – a trend that is continuing in 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. Risk premiums for companies with good credit ratings widened from approximately 56 basis points in February 2020 to levels exceeding 200 basis points in March before narrowing again to less than 60 basis points by the end of 2020. Risk premiums for banks followed a similar trend. Volatility was significantly higher for banks' subordinated securities, and the yield on euro-denominated AT1 bonds briefly increased in early 2020 from 3.0 percent to levels exceeding 20 percent and ended in 2020 with an average return of 3.6 percent.

At the same time, interest expectations have changed and the market is assuming negative interest rates for a longer period. In April 2019, the market expectation was that a positive one-month overnight index swap (OIS) rate would be reached by 2022, whereas in June 2020 the market expectation changed such that this would not be the case until 2030. At the same time, the yield curve fell significantly at the long end, which has a negative effect on the profitability of the maturity transformation of banks.

On the regulatory side, there were also comprehensive measures to support bank lending. 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 capital (CET1). At the end of June 2020, further relaxations in the Capital Requirements Regulation (CRR) also came into force relating to the CRR quick fix and could already be used in part for reporting at the reporting date of 30 June 2020. The changes include a series of measures that have a positive effect on the capital ratios of banks, such as supporting factors for exposures to small and medium-sized enterprises, certain infrastructure financing measures and exemptions for the capital deduction of software. The latter was only applied in the fourth quarter of 2020 based on the technical regulatory standards of the EBA. As regards the leverage ratio, the 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.

Financial Review (Continued)

With regard to liquidity indicators, the minimum requirements for the liquidity coverage ratio have been temporarily relaxed. In addition to the temporary relaxation 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. This reduces the immediate negative impact on balance sheet items, profitability and shareholders' capital. However, the banking supervisors are focusing on identifying weak borrowers within the moratoria and on adequate risk provisioning by banks for possible future defaults.

In addition, the ECB urged banks in March 2020 to refrain from making dividend payments to external investors and share buybacks at top group level until October 2020. This arrangement was extended in July 2020 until the end of 2020. In December 2020, the ECB changed its guidance. In the first three quarters of 2021, dividend payments and share buybacks will be possible again within certain limits. 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. However, banks were given the prospect of ending restrictions on dividends and share buybacks from October 2021. 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.

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 temporarily relaxed. Although the Single Resolution Board (SRB) is adhering to its original MREL timetable despite the COVID-19 pandemic, the focus of the SRB is on meeting both the interim target in 2022 and the final requirements in 2024.

The performance of equity markets was characterised by very high volatility. The Euro STOXX 50 lost more than 38 percent of its value between mid-February and mid-March, for instance. The performance of European bank shares lagged behind the overall market despite comprehensive measures. Although the Euro STOXX 50 declined by 6 percent in 2020, the STOXX Europe 600 Banks fell by 26 percent and at the end of September 2020, the STOXX Europe 600 Banks index reached its all-time low. The main reasons for this were uncertainty about further macroeconomic development, the flatter yield curve and the suspension of dividend payments. However, the STOXX Europe 600 Banks index has again posted above-average gains since the end of September 2020.

In the USA, the yield on ten-year US treasury bonds fell significantly from over 1.8 percent at the end of 2019 to almost 0.5 percent in August 2020, but then increased again to over 0.9 percent. The marked decrease is mainly attributable to the interest rate policy of the American Federal Reserve Bank, which lowered the Federal Funds Rate distinctly from 1.50-1.75 percent at the end of 2019 in two steps to only 0-0.25 percent, while the ECB left interest rates unchanged (interest rate for main refinancing operations at zero and ECB deposit rate at minus 0.5 percent). The yield on the ten-year bonds of the Federal Republic of Germany also fell significantly in 2020 from negative 22 basis points down to negative 86 basis points in March. The yield then rose again substantially to negative 57 basis points by 31 December 2020. The 3-month Euribor remained in the range of negative 40 basis points until mid-March but rose again in April and May to a level of above negative 30 basis points before falling again to below negative 50 basis points in October.

In 2020, the euro appreciated considerably by nine percent against the US dollar, primarily following the political agreement between the EU Heads of State or Government regarding the Recovery Fund (Next Generation EU) and the new EU multi-annual budget.

Impact of the COVID-19 pandemic

The COVID-19 pandemic has had an impact on the business activities of HVB Group. HVB Group responded to the COVID-19 pandemic at a very early stage as the health and safety of our employees and customers had and has top priority. We set up and permanently put in place a crisis team as early as February. HVB immediately began to take protective measures that were adjusted several times over the year to align with the development of the pandemic. Among other things, this included an alternating opening of branches and a widespread shift to employees working from home. We had already created the necessary prerequisites for remote work through past investments in digitalisation and IT. This enabled us to rapidly achieve a high percentage of staff working remotely, which reached up to an estimated 85 percent at peak times. The targeted expansion of our digital channels strengthened our customer service. Despite the pandemic, we were able to make our entire range of products available without restriction. This applies in particular to the distressed state of customers caused by the COVID-19 pandemic when they were dependent on the support of the Bank. Thus, HVB Group offered substantial support to customers seeking access to government subsidy programmes and subsidised loans, such as those offered by the Kreditanstalt für Wiederaufbau (KfW).

The possibility for consumers and small businesses to apply under certain conditions for deferred payment of instalments for a three-month period, which was provided for in legislation to mitigate the effects of the COVID-19 pandemic, was limited in time from 1 April 2020 until 30 June 2020. Our customers took advantage of this possibility only to a small extent. In addition, HVB Group took part in the moratoria of development banks and deferred payments for borrowers of subsidised loans in accordance with the guidelines of the development banks. These expire in the first half of 2021. The volume of loans that were still subject to a deferral agreement under a moratorium at year-end 2020 amounts to €6 million.

The COVID-19 pandemic has impacted the profit and loss of HVB Group and the loan-loss provisions in the lending business. This is indicated in the presentation of HVB Group's operating performance and the forecast report/outlook in this Management's Discussion and Analysis.

Financial Review (Continued)

Operating performance of HVB Group

All the statements regarding the operating performance of HVB Group in this Management's Discussion and Analysis refer to the structure of our income statement.

INCOME/EXPENSE	1/1–31/12/2020 € millions	1/1–31/12/2019 € millions	CHANGE € millions	CHANGE in %
Net interest	2,413	2,388	+ 25	+ 1.0
Dividends and other income from equity investments	37	24	+ 13	+ 54.2
Net fees and commissions	1,007	973	+ 34	+ 3.5
Net trading income	662	579	+ 83	+ 14.3
Net gains/(losses) on financial assets and liabilities at fair value	(78)	108	(186)	
Net gains/(losses) on derecognition of financial				
instruments measured at cost	(3)	13	(16)	
Net other expenses/income	603	742	(139)	(18.7)
of which net valuation/disposal of investment properties	18	405	(387)	(95.6)
OPERATING INCOME	**4,641**	**4,827**	**(186)**	**(3.9)**
Payroll costs	(1,451)	(1,453)	+ 2	(0.1)
Other administrative expenses	(1,231)	(1,220)	(11)	+ 0.9
Amortisation, depreciation and impairment losses				
on intangible and tangible assets	(126)	(483)	+ 357	(73.9)
Operating costs	**(2,808)**	**(3,156)**	**+ 348**	**(11.0)**
OPERATING PROFIT/(LOSS)	**1,833**	**1,671**	**+ 162**	**+ 9.7**
Credit impairment losses IFRS 9	(733)	(115)	(618)	>+ 100.0
NET OPERATING PROFIT/(LOSS)	**1,100**	**1,556**	**(456)**	**(29.3)**
Provisions for risks and charges	11	313	(302)	(96.5)
Restructuring costs	(35)	(363)	+ 328	(90.4)
Net gains/(losses) on disposals of investments	(4)	(15)	+ 11	(73.3)
PROFIT/(LOSS) BEFORE TAX AND				
IMPAIRMENT ON GOODWILL	**1,072**	**1,491**	**(419)**	**(28.1)**
Impairment on goodwill	—	(130)	+ 130	(100.0)
PROFIT/(LOSS) BEFORE TAX	**1,072**	**1,361**	**(289)**	**(21.2)**
Income tax for the period	(404)	(533)	+ 129	(24.2)
PROFIT/(LOSS) AFTER TAX	**668**	**828**	**(160)**	**(19.3)**
CONSOLIDATED PROFIT/(LOSS)	**668**	**828**	**(160)**	**(19.3)**
attributable to the shareholder of UniCredit Bank AG	668	811	(143)	(17.6)
attributable to minorities	—	17	(17)	(100.0)

Net interest
In the reporting period, net interest came to €2,413 million compared with €2,388 million in the previous-year period and was thus a slight €25 million or 1.0% up on the previous-year figure. Net interest in the reporting year also includes interest income from a tax refund and the positive effects from participating in the TLTRO III programme, which represents a very favourable refinancing option for HVB.

Dividends and other income from equity investments
Dividends and other income from equity investments amounted to €37 million in the reporting period, which represents a significant increase of €13 million. While dividend income, at €18 million, has seen a substantial year-on-year decline of €23 million, the result from companies accounted for using the equity method rose sharply from €1 million in the previous year to €19 million in the reporting year. This is attributable to the sale of a 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 €1,007 million and are thus a slight €34 million or 3.5% 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.

Net trading income
In the reporting period, there was a significant increase of €83 million, or 14.3%, to €662 million in net trading income, which more than offset the charge from higher valuation discounts in the context of the fair value measurement of derivatives, particularly credit value adjustments. The latter are partly due to the market turbulence surrounding the COVID-19 pandemic. The increase was attributable to higher income as a result of the greater demand for standardised securities, particularly after the first wave of the COVID-19 pandemic and in the commodities trade. This was offset by the somewhat weaker business with certificates and the market conditions in equity instruments.

Net gains/losses on financial assets and liabilities at fair value
A loss of €78 million is reported for financial assets and liabilities at fair value in the reporting period, which is a sharp €186 million lower than the gain of €108 million reported in the previous-year period. This is primarily attributable to the loss of €33 million on financial liabilities designated at FVTPL, for which a gain of €54 million was reported in the previous-year period. In addition, hedge accounting effects generated a loss of €59 million in the reporting year, whereas a gain of €48 million was recorded in the previous-year period. Consequently, the result from financial liabilities designated at FVTPL fell a sharp €87 million and hedge accounting effects a sharp €107 million.

Net gains/losses on derecognition of financial instruments measured at cost
This item reports a loss of €3 million compared with a gain of €13 million in the previous year. 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 so that they are sold only in exceptional cases.

Net other expenses/income
The item "Net other expenses/income" reports an income of €603 million in the reporting period and is thus a distinct €139 million lower than the comparable figure of €742 million in the previous-year period. This total contains income from the sale of land and buildings of €549 million that was generated in particular through the sale of the "Am Tucherpark" site at the beginning of 2020. The net result from the sale of land and buildings rose sharply by €489 million compared with the previous-year figure of €60 million. By contrast, there was a very significant decline from €405 million to €18 million in the result from the fair value measurement of investment properties in the reporting year compared with the previous-year period. In addition, on account of the sales in the previous year, there has been a sharp decline in the item "Net other expenses/income" (cessation of revenue from the BARD Offshore 1 wind farm and decline in rental income from investment properties, among others). For details, please refer to the Note "Net other expenses/income" in the notes to the consolidated financial statements.

Financial Review (Continued)

Operating costs

Operating costs amounted to €2,808 million in the reporting period and were thus a significant €348 million or 11.0 percent down on the previous-year figure of €3,156 million. This is mainly due to the decline of €357 million to €126 million in amortisation, depreciation and impairment losses on intangible and tangible assets. The previous-year period contains the unscheduled write-down of €315 million and the scheduled depreciation of €58 million on the Bard Offshore 1 wind farm, which was sold in the previous year and no longer needed to be accounted for in the reporting year. This was offset by an increase of €13 million in amortisation, depreciation and impairment losses on intangible and tangible assets resulting from the prospective transition to the revaluation method for owner-occupied property at year-end 2019 as the fair values determined now serve as the basis of measurement for the depreciation and write-downs whereas in the previous year, depreciation and write-downs were determined on the basis of amortised cost. Payroll costs and the various other administrative expenses changed or decreased only marginally compared with the previous-year period.

Operating profit (before credit impairment losses IFRS 9)

Operating profit (before credit impairment losses IFRS 9) amounted to €1,833 million in the reporting period and thus rose significantly by €162 million compared with the previous-year figure of €1,671 million. As the decline of €348 million in operating costs was stronger than the decline of €186 million in operating income, the operating profit (before credit impairment losses IFRS 9) has increased. The decline in operating income is largely due to the decline in net gains/losses on financial assets and liabilities at fair value and net other expenses/income. The net gains/losses on financial assets and liabilities at fair value have been largely affected by the lower result from financial liabilities designated at FVTPL and the decline in hedge accounting effects whereas the decrease in net expenses/income is attributable to various effects which partly offset each other. Against the backdrop of the disposals of investment properties and real estate in the reporting period and in previous years, this item tends to show a decline. Compared with the previous-year period, the other components of operating income remained largely stable. Administrative expenses fell sharply due to the elimination of the unscheduled write-down and scheduled depreciation on the BARD Offshore 1 wind farm compared with the previous-year period.

The cost-income ratio (ratio of operating costs to operating income) thus distinctly improved to 60.5% in the reporting period after 65.4% in the previous-year period.

Credit impairment losses IFRS 9

While credit impairment losses IFRS 9 came to €115 million in the previous-year period, thus also benefiting from the positive economic development in Germany in recent years, these rose sharply to €733 million in the reporting period. The increase is mainly attributable to a rise in additions to specific valuation allowances of €510 million in the reporting year compared with €71 million in the previous year and was largely influenced by the default of a few larger credit exposures, also against the backdrop of the COVID-19 pandemic. In addition, the increase in portfolio valuation allowances accounted for €223 million in the reporting year compared with €44 million in the previous year. Besides the adjustment of the assumptions used to reflect future economic conditions in the models for calculating the expected credit loss, the increase in the credit volume, which was allocated to Stage 2 and is thus subject to a value adjustment with an expected loss over the (residual) term instead of an expected twelve-month credit loss at Stage 1, also had an impact.

Provisions for risks and charges

In the reporting period, net income from the reversal of provisions for risks and charges amounted to €11 million. The net income of €313 million reported in the previous-year period from the reversal of provisions was related to a settlement the Bank reached in April 2019 with the US and New York authorities to conclude the proceedings for violations of US financial sanctions in the period from 2002 to 2012. Since the amounts payable according to the settlement were lower than the provisions set up for it in the previous years, it was possible to reverse the excess last year.

Restructuring costs

In the reporting year, restructuring costs totalled €35 million, which were primarily attributable to an increase in restructuring provisions in 2019. In the previous year, net restructuring costs of €363 million accrued for the implementation of the four-year Team 23 strategic plan. This amount includes expenses for the setting aside of restructuring provisions in connection with measures to boost efficiency and earnings in the multi-year plan 2020-2023 (see the section entitled "Team 23" in this Management's Discussion and Analysis). By contrast, the restructuring provision set aside in the years prior to 2019 and the remaining balance of the provision for Transform 2019 in the previous year were reversed in this item and recognised as income. These provisions essentially cover the provisioning requirements for early retirement or severance payments.

Net gains/losses on disposals of investments

Impairments on companies accounted for using the equity method totalled €3 million in the reporting year. These relate to the associate Comtrade B.V. accounted for using the equity method, which sold a division in the reporting year.

In the reporting period, there were no further relevant sales. No gains or losses were generated on the disposal of investments. In the previous-year period, a net loss of €15 million is reported.

Profit/loss before tax and impairment on goodwill

In the reporting period, a profit before tax and impairment on goodwill of €1,072 million was generated, which represents a very sharp decrease of €419 million or 28.1% on the previous-year period. While the slight decline in operating income was more than offset by the very sharp drop in operating costs, the very significant rise in credit impairment losses (IFRS 9) ultimately resulted in a very sharp decrease in profit before tax and impairment on goodwill.

Impairment on goodwill

There was no impairment on goodwill in the reporting period. The remaining goodwill totalling €130 million on the Commercial Banking business segment was completely written off in the previous-year period.

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

In the reporting period, HVB Group generated profit before tax of €1,072 million, which, however, is a very significant €289 million or 21.2% lower than the profit before tax of €1,361 million generated in the previous-year period.

Income tax expense amounted to €404 million in the reporting period and was thus also €129 million or 24.2% sharply down on the income tax expense of €533 million in the previous-year period, partly as a result of the decline in profit.

After deducting income tax, HVB Group generated consolidated profit of €668 million in the reporting period, which represents a significant decline of €160 million or 19.3% compared with the consolidated profit of the previous-year period of €828 million.

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 12.45 percent equity is allocated to the average risk-weighted assets. In the reporting year, this ratio slipped to 6.5 percent compared with 7.5 percent in the previous year.

Appropriation of profit

In the 2020 financial year, the profit available for distribution disclosed in the annual financial statements of HVB, which forms the basis for the appropriation of profit, amounts to €400 million. This consists of the net income for the year of €533 million generated in the reporting year less the transfer to other retained earnings of €133 million. We will propose to the Shareholders' Meeting that a dividend of €400 million be paid in total 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. The profit available for distribution of €3,288 million reported in the previous year was distributed to UniCredit on 2 November 2020 in accordance with a resolution adopted by the Shareholders' Meeting on 23 June 2020.

Financial Review (Continued)

Segment results by business 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 business segment" in the consolidated financial statements. All the business segments generated a profit before tax or a consolidated profit in the reporting period.

(€ millions)

OPERATING INCOME	1/1–31/12/2020	1/1–31/12/2019
Commercial Banking	2,256	2,282
Corporate & Investment Banking	1,665	1,914
Group Corporate Centre	92	123
Other	62	69
Consolidation	(28)	(20)
Total	**4,047**	**4,368**

(€ millions)

PROFIT/(LOSS) BEFORE TAX	1/1–31/12/2020	1/1–31/12/2019
Commercial Banking	214	548
Corporate & Investment Banking	231	567
Group Corporate Centre	67	333
Other	575	45
Consolidation	(15)	(2)
Total	**1,072**	**1,491**

(€ millions)

CONSOLIDATED PROFIT/(LOSS)	1/1–31/12/2020	1/1–31/12/2019
Commercial Banking	124	221
Corporate & Investment Banking	101	327
Group Corporate Centre	69	231
Other	384	33
Consolidation	(10)	16
Total	**668**	**828**

General comments on the business situation in 2020 and comparison with last year's expectations

The 2020 reporting year was significantly impacted by the COVID-19 pandemic. Although HVB was able to overcome the operational challenges caused by the COVID-19 pandemic (including a temporary lockdown), the COVID-19 pandemic resulted in major economic restrictions. Against this backdrop, HVB Group managed to generate a satisfactory result in its operating business.

Operating income is moderately below the previous-year result contrary to the forecast from the previous year, which had assumed a slight increase. Various developments in the individual items led to this result. While the gains on financial assets and liabilities at fair value were considerably lower and net other expenses/income showed weaker development, other components of operating income essentially remained unchanged or increased slightly. As in the previous year, net other expenses/income contain effects from the fair value measurement of real estate and from the disposal of properties, whereby the net effect of this has increased in the aggregate in the reporting year compared with the previous year.

As projected, there was a sharp decline in administrative expenses in the reporting year on account of the elimination of the unscheduled write-down and scheduled depreciation taken on the BARD Offshore 1 wind farm.

The item "Credit impairment losses IFRS 9" comes to €733 million and has therefore increased very substantially. Although we projected a significant increase, "Credit impairment losses IFRS 9" turned out higher than expected due to the economic burdens caused by the COVID-19 pandemic.

Profit before tax fell a significant €289 million to €1,072 million in the reporting year and therefore did not increase significantly as had been forecast. While the slight decline in operating income was more than offset by the sharp decrease in operating costs, the very substantial rise in credit impairment losses IFRS 9, which must be seen in the light of the COVID-19 pandemic, resulted in a decline in profit before tax. Even the relief afforded by the elimination of impairment on goodwill of €130 million still posted in the previous year was unable to compensate the decline in profit before tax.

Profit after tax decreased significantly year on year by €160 million to €668 million for the reasons named above and therefore the projected substantial rise in profit after tax did not occur.

The cost-income ratio, at 60.5%, is lower than the level in 2019 (65.4%) and has thus improved as expected. This was affected in particular by the decline in administrative expenses on account of the elimination of the non-scheduled write-down and the scheduled depreciation on the BARD Offshore 1 wind farm in the previous year.

The CET1 capital ratio in accordance with approved consolidated financial statements amounted to 18.8% in the reporting year (previous year: 17.5%). The year-on-year increase of 130 basis points is due to the decrease in total risk-weighted assets.

Financial situation

Total assets

The total assets of HVB Group increased by €34.5 billion, or 11.4%, to €338.1 billion at 31 December 2020 compared with year-end 2019.

On the assets side, cash and cash balances rose sharply by €21.3 billion to €47.5 billion, which is exclusively due to the increase in credit balances at central banks.

By contrast, financial assets held for trading increased by a substantial €12.9 billion to €82.7 billion, mainly on account of higher positive fair values of derivative financial instruments (up €9.5 billion), other financial assets held for trading (up €3.6 billion) and equity instruments (up €0.9 billion). A development in the opposite direction was seen in fixed-income securities (down €1.1 billion).

The portfolio of financial assets at FVTPL, which consists mainly of securities, fell significantly by €4.0 billion to €11.4 billion compared with year-end 2019.

Financial assets at FVTOCI, which consists exclusively of securities, also declined a substantial €2.2 billion to €12.5 billion compared with the previous year.

Loans and receivables with banks rose marginally by €2.1 billion to €34.0 billion, which is mainly attributable to increases in the reverse repo volume (up €3.9 billion), securities (up €1.0 billion) and cash collateral (up €0.1 billion) whereas there were declines in other loans to banks (down €1.8 billion) and current accounts (down €1.1 billion).

Loans and receivables with customers increased slightly by €4.6 billion to €144.2 billion. This rise is primarily due to larger volumes of securities (up €6.1 billion), reverse repos (up €1.2 billion), mortgage loans (up €1.0 billion), non-performing loans and receivables (up €0.8 billion) and cash collateral (up €0.5 billion). A development in the opposite direction was seen in other loans and receivables (down €3.0 billion), current accounts (down €1.8 billion and finance leases (down €0.2 billion).

Financial Review (Continued)

The item "Non-current assets or disposal groups held for sale" rose a significant €0.3 billion to €0.8 billion. Within this total, disposals of €0.4 billion in the first half of the year were offset by additions from reclassifications of €0.8 billion in the second half.

On the liabilities side, the item "Deposits from banks" rose a slight €3.2 billion to €73.5 billion. The main increases were €10.8 billion in deposits from central banks, €1.9 billion in cash collateral and €1.2 billion in other liabilities. By contrast, decreases were posted in repos (down €5.8 billion), term deposits (down €3.9 billion) and current accounts (down €1.0 billion). Deposits from central banks were affected by the participation in the TLTRO III programme, under which HVB Group raised significantly higher funds than were simultaneously used for repayment under the TLTRO II programme.

There was a significant rise of €18.4 billion to €143.8 billion in deposits from customers. This increase is primarily due to the volume of current accounts (up €13.8 billion), repos (up €6.2 billion) and cash collateral (up €1.9 billion) whereas there were declines of €3.3 billion in term deposits, €0.1 billion in promissory notes and €0.1 billion in other liabilities.

Compared with year-end 2019, there was a substantial increase in debt securities in issue, which were up by €3.5 billion to €31.7 billion.

Financial liabilities held for trading rose significantly by €10.3 billion to €57.0 billion compared with year-end 2019. The increase is attributable to the negative fair values from derivative financial instruments totalling €6.5 billion and other financial liabilities held for trading in the amount of €3.8 billion.

Shareholders' equity shown in the balance sheet decreased by €1.0 billion to €17.9 billion at the reporting date. The main reason for the decline is the resolution adopted at the Annual Shareholders' Meeting held on 23 June 2020 on the distribution of the 2019 profit available for distribution of €3.3 billion. The issuance of Tier 1 capital instruments totalling €1.7 billion had the opposite effect, which are reported in equity. The consolidated profit of €0.7 billion was unable to offset the decline, especially since a loss of €0.1 billion was reported under other comprehensive income.

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 €85.3 billion at the reporting date compared with €77.5 billion at the end of the previous year. This figure includes contingent liabilities in the form of financial guarantees of €24.6 billion (year-end 2019: €25.7 billion) and other commitments of €60.7 billion (year-end 2019: €51.8 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 €80.6 billion at 31 December 2020 and were thus €4.9 billion lower than at year-end 2019. This is mainly due to the risk-weighted assets for credit risk (including counterparty default risk), which fell by €3.2 billion to €62.9 billion. The risk-weighted assets for market risk declined by €1.1 billion to €9.1 billion. Furthermore, the risk-weighted asset equivalents for operational risk decreased by €0.5 billion to €8.7 billion.

At 31 December 2020, Common Equity Tier 1 capital compliant with the CRR II excluding hybrid capital (CET1 capital) amounted to €15.1 billion at 31 December 2020 and Tier 1 capital to €16.8 billion. The Tier 1 capital rose following the issue of €1.7 billion in additional Tier 1 capital compared with year-end 2019 (31 December 2019: €15.0 billion in accordance with approved consolidated financial statements in each case). 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 18.8% or 20.9% at 31 December 2020 (31 December 2019: 17.5% in both cases). The increase is attributable to the issue of additional Tier 1 capital and to a decrease in risk-weighted assets. Own funds came to €18.1 billion at 31 December 2020 (31 December 2019: €15.5 billion in accordance with approved consolidated financial statements). The own funds ratio was 22.5% at 31 December 2020 (31 December 2019: 18.1%).

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. In accordance with the Commission Delegated Regulation (EU) 2015/62, the leverage ratio of HVB Group in accordance with approved consolidated financial statements amounted to 4.9% at 31 December 2020 (31 December 2019: 4.3%). 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 31 December 2020 (in accordance with approved consolidated financial statements). Had the aforementioned article not been applied, the leverage ratio of HVB Group as at 31 December 2020 would amount to 4.4% (in accordance with approved consolidated financial statements).

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 last affirmed HVB's ratings on 1 April 2020. Among others, the counterparty risk rating (CRR) was, for example, 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'. The stand-alone rating is thus one notch higher than that of UniCredit. The higher rating is based on Moody's assessment that the intragroup exposure to UniCredit will remain at a manageable level throughout the credit cycle due to the existing restrictions.

Furthermore, the rating confirmation reflects the resilience of HVB's financial strength, which is mainly due to its capital base and good liquidity position. Therefore, HVB appears well prepared to cope with any potential negative effects on its business environment as a result of the COVID-19 pandemic. The outlook was lowered to "negative" and reflects the probability of a downgrade if UniCredit's stand-alone rating should deteriorate in the course of the COVID-19 pandemic. On account of the (operating) interdependencies, HVB's stand-alone rating can currently only be one notch above that of UniCredit at the maximum.

In view of the strong interdependencies between UniCredit and HVB and following the downgrading of UniCredit S.p.A., which was driven solely by the rating for Italy, Fitch lowered HVB's ratings by one notch on 14 May 2020. Among others, this affected the senior preferred and the deposit rating at BBB+/F2 (previously: A-/F2), the senior non-preferred rating at BBB (previously: BBB+) and the stand-alone rating at bbb (previously: bbb+). Fitch continues to emphasize the very good capital base and the resulting high degree of flexibility to mitigate the possible deteriorations in asset quality as well as in the earnings situation caused by the COVID-19 pandemic. HVB's rating remains one notch above UniCredit's rating. The outlook of the rating remains "negative" as Fitch assumes that the fungibility of capital and liquidity could increase under the European Single Supervisory Mechanism (SSM) and resolution strategies (SRB) and thus the financial flexibility of HVB might be restricted if UniCredit implements its "single-point-of-entry" resolution strategy.

S&P last affirmed HVB's ratings on 12 December 2019. The resolution counterparty rating remains at A-/A-2, the issuer credit rating and the rating for senior unsecured instruments of HVB are affirmed at BBB+/A-2 and the senior subordinated debt rating at BBB. According to S&P the 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 still negative outlook for the issuer credit rating of HVB indicates that HVB's ratings might be lowered in the medium term. From the perspective of S&P, this reflects the uncertainties regarding the implementation of UniCredit's "single-point-of-entry" resolution strategy and the related effects on the subsidiaries.

Financial Review (Continued)

Report on subsequent events (events after the reporting period)

There were no significant events at HVB Group after 31 December 2020 to report.

Forecast report/Outlook

Management's Discussion and Analysis and the rest of the Annual Report include statements, expectations and forecasts concerning the future. These statements, expectations and forecasts are based on plans and estimates supported by the information available to us at the present time. We assume no obligation to update these statements in the light of new information or future events. Known or unknown risks and uncertainties may entail forward-looking statements, and the actual results and developments may thus differ significantly from those expected at present. Such discrepancies may result particularly from changes to the general economic situation and the competitive situation, developments on international capital markets, the possible default of borrowers or contracting parties in commercial transactions, the implementation of restructuring measures, amendments to national and international legislation relating in particular to supervisory and tax regulations, the reliability of our risk-management procedures and methods as well as other risks, some of which are described in detail in the Risk Report.

General economic outlook

The COVID-19 pandemic will continue to weigh on global economic development, as most of the developed economies are currently undergoing a second wave of infections. However, the restrictive measures once again put in place have already begun to flatten the epidemic curves in many countries. According to Johns Hopkins University, more than one hundred million people worldwide have been infected with the SARS-CoV-2 coronavirus (as at January 2021). The USA is by far the country most severely affected in the world by the pandemic, followed by India, Brazil and Russia. Among the most severely affected countries in Europe are the United Kingdom, Spain, Italy, France and Germany.

After the slump of 3.5 percent in global output in 2020, we expect an increase of around 5.4 percent in 2021 since the impact that the COVID-19 pandemic is having on economic activity will gradually taper off (current status as at February 2021; cf. the publication by UniCredit Research, The UniCredit Macro & Markets Weekly, "Transatlantic growth gap set to widen", published on 5 February 2021). The distribution of effective vaccines and new therapies to suppress transmission will probably still take some time but should largely prevent the need for emergency measures to ease the burden on healthcare systems (such as nationwide lockdowns) from autumn 2021 onwards. In the short-term, a rise in COVID-19 cases and new restrictions in Europe and the USA will result in a decline in economic activity in the first quarter of 2021 which, however, will be less severe than at the beginning of the COVID-19 pandemic in 2020. Strong fiscal policy support could mitigate the effects on jobs and incomes. China is likely to maintain its robust recovery. Upside risks to our forecast consist in a stronger than expected increase in vaccine production and accelerated vaccination campaigns before the start of the second half of the year, while new and more contagious virus mutations pose a clear downside risk.

Furthermore, the trade tensions between the USA and China will continue. Although the USA and China have reached a "Phase 1" agreement, we consider such an agreement to be only provisional and incomplete, as it does not address the major issues underlying this dispute. After the election of Joe Biden as US President, we do not expect the USA to impose tariffs on European cars. Even though the United Kingdom reached a Brexit agreement with the EU at the end of 2020, the greater bureaucratic efforts entailed in handling goods are likely to weigh on trade between the two economic areas well into the year. We currently see little risk that the budget negotiations between Italy and the EU Commission could adversely affect the markets this year. After the resignation of Prime Minister Giuseppe Conte, a new cabinet was sworn in under the leadership of former ECB President Mario Draghi.

The US economy is likely to expand by 4.8 percent in 2021 (UniCredit Research, The UniCredit Macro & Markets Weekly, "Transatlantic growth gap set to widen" published on 5 February 2021) after contracting by 3.5 percent in the previous year. We expect the US economy to have recovered to the level before the COVID-19 pandemic in the third quarter of 2021. GDP recovery is likely to begin in the second quarter as the restrictions in place to contain the COVID-19 pandemic are increasingly lifted. In particular, we assume that especially an increase of vaccinations will boost growth from the second half of 2021 and combined with better methods of treatment, the effects that the COVID-19 pandemic is having on the economy will subside. Social expenditure is likely to increase, although consumers will continue to exercise a certain amount of caution. The extremely expansive fiscal policy should also support economic recovery.

During the COVID-19 pandemic, the U.S. Federal Reserve lowered the key interest rate to the range of 0 to 0.25 percent and signalled its intention to keep interest rates close to zero until 2023. In addition, it linked the purchase of assets to a recovery of the economy and will maintain the current pace of purchases until substantial progress is made in achieving its targets (maximum employment and price stability). According to its own statement, however, the economy is still far from reaching these targets. We therefore assume that the Fed will continue purchasing US Treasuries and MBS at the current pace at least until the end of 2021. A tapering off of the bond purchases might then already be announced in December this year provided the mass vaccination continues as scheduled and the economy recovers.

For the eurozone, we forecast a 3.5 percent increase in GDP in 2021 (UniCredit Research, The UniCredit Macro & Markets Weekly, "Transatlantic growth gap set to widen", published on 5 February 2021). At the beginning of the year, economic activity is likely to decline once again on account of a second wave of infections coupled with the related containment measures. Compared with its peak in July 2020, the sentiment in the service sector has already deteriorated considerably and indicates a further slowdown as the restrictive measures are hitting this sector in particular. However, the manufacturing industry, which has proven to be resilient so far, is not expected to be able to disengage from the development in the service sector for too long.

We thus expect production activity in the first quarter of 2021 to develop into a damper on GDP growth. The gradual lifting of the containment measures at the beginning of the spring is likely to result in a recovery of macroeconomic activity in the second quarter of 2021, although this is unlikely to fully materialise until the third quarter of 2021 (UniCredit Research, The UniCredit Macro & Markets Weekly, "Transatlantic growth gap set to widen", published on 5 February 2021). 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. In addition, it announced that it would be extending its longer-term refinancing operations (TLTRO III) until mid-2022. HVB Group assumes that the ECB will extend both the PEPP and the favourable conditions for TLTRO III beyond March 2022 as, until the ECB's decision (probably in September or December this year), GDP is likely to remain below the pre-pandemic level. The rhetoric on euro appreciation remains unchanged and confirms our opinion that the euro exchange rate has not yet reached the ECB's absolute limit.

On a country level (UniCredit Research, The UniCredit Macro & Markets Weekly, "Transatlantic growth gap set to widen", published on 5 February 2021), HVB forecasts an increase in GDP in Germany of 3.3 percent this year compared with the previous year (GDP growth in 2020: down 5.0 percent). In France, GDP in 2021 is set to increase by 4.5 percent compared with the previous year (GDP growth in 2020: down 8.3 percent). This year, HVB Group expects Italy's economic output to increase by 3.4 percent compared with the previous year (GDP growth in 2020: down 8.9 percent), while Spain is likely to record an increase of 4.4 percent (GDP growth in 2020: down 11.0 percent). The UK economy will probably increase by 4.3 percent this year (GDP growth in 2020: down 10.0 percent).

Financial Review (Continued)

Overall, the German economy showed a solid recovery in the second half of 2020. This is mainly due to the robust development of industry, which benefited more from the recovery in China than its competitors in the eurozone did. In addition, private consumer spending also benefited from the reduction in value added tax that resulted in the pulling forward of purchases of consumer durables. Economic momentum was thus less strong in the fourth quarter of 2020 than anticipated. At the beginning of 2021, however, the downward momentum in Germany is likely to accelerate, although a much smaller decline is expected than in the spring of 2020. In the course of the year, economic activity should pick up again with the GDP possibly already reaching the level before the COVID-19 pandemic in the fourth quarter of 2021.

Banking sector development in 2021

The COVID-19 pandemic will continue to determine the course of the year 2021. Lockdowns in Europe were extended or made more stringent in the first quarter of 2021 and the gradual phasing out of support measures for borrowers will lead to a rise in loan defaults later in 2021.

The European banking sector was in a good starting situation in 2020 when the crisis began. The capital base had been substantially strengthened in the years previously and the liquidity situation in the banking sector is very good. Relatively low profitability remains a weak point in the European banking sector. In addition, the European banking market presents a highly heterogeneous picture in terms of profitability: While in one half of the countries in Europe, banks were able to earn their cost of equity of an estimated 8 percent on average, in the other half, banks generated returns on equity below the estimated cost of equity of 8 percent.

In 2020, profit development came under additional pressure as banks were required to set aside significantly higher loan-loss provisions. In the first three quarters of 2020, the average return on equity was a mere 1.4 percent (data from the European Banking Authority, EBA). European banks posted loan-loss provisions in the first nine months of 2020 that were more than twice as high as those in 2019. 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 on equity directly. However, the mood brightened in the second half of the year and banks and analysts expect a substantial decrease in loan-loss provisions for 2021 compared with 2020 (Bloomberg Consensus estimate).

On the structural side, there were two trends that will improve the profitability of European banks in the medium term. Firstly, strong growth was seen in digital customer interaction, which has led to a further acceleration in the structural adjustment of the branch network. Secondly, another trend seen in 2020 was the increase in larger bank mergers in Spain and Italy, which should also improve profitability in the medium term.

Despite the crisis, asset quality continued to improve in 2020 due to very extensive NPL sales (EBA data). Comprehensive government support measures and loan guarantees as well as payment moratoria for loan payments helped to staunch the flow of impaired loans, despite the strong economic decline. However, the asset quality of European banks will be affected by the crisis with a significant time lag, which means that a more substantial increase in non-performing loans will not occur until mid-2021 and 2022. A major factor in the delayed impact is the extensive use of payment moratoria. At the end of September 2020, €590 billion or 5 percent of all the loans to households and companies had a payment moratorium (EBA data). Due to the more medium-term perspective in the application of IFRS 9 encouraged by the supervisory authorities, most loans affected by the payment moratoria are not classified as non-performing, although some of these loans are likely to be non-performing once the payment moratoria expire. The numerous government 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 government guarantee granted as a support measure defaults. Furthermore, the ECB supervision holds the view that implementing the discussed European or national bad bank solution could have a positive impact on the asset quality of the banking sector and clean up balance sheets more quickly, rather than addressing the problem gradually over a longer period of time.

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 influence 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.

Banks' capital ratios came under pressure in the first quarter 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 government guarantee framework for corporate loans as well as a partial repayment of drawn credit lines by companies had a positive effect on the capital ratios in the course of 2020. European banks' average capital ratio of 15.1 percent at the end of the third quarter was higher than the level at the end of 2019 (EBA data). The capital ratios tended to improve even further in the fourth quarter and the ECB's restrictions concerning the profit distribution of banks continue to apply for the time being until the end of September 2021. This means that there is still a high capital buffer to cushion the expected increase in defaults. The results of the ECB's stress tests, which are expected to be published on 31 July 2021, will provide insight into the resilience of the banking sector as another recession is simulated for 2021 to 2023 (EBA stress test scenarios).

Financial Review (Continued)

Development of HVB Group

It is to be assumed that the phase of economic weakness will continue in the short term. We project the current wave of COVID-19 and the related lockdown measures to lead to a technical recession in the eurozone in the first quarter of 2021. Due to the increasingly warmer weather and the introduction of a series of vaccines, the summer is expected to bring a loosening of the lockdown measures to a large extent which, in turn, should buoy up market sentiment. This is likely to lead to real economic recovery in the second half of 2021 and in 2022.

As previously described in the "Team 23" section, the four-year strategic plan continues to focus on growth and acceleration in our business activities. We intend to increase and strengthen our customer base, drive forward our productivity and expand our digitalisation activities. In doing so, we intend to deliver sustainable yields, operate reliably with integrity and deal responsibly with resources and the environment. We will also aim to do more than "business as usual". To underpin our growth, in the coming years we will be investing in further digitalisation, automation and end-to-end process optimisation. In addition, we will create growth opportunities through greater interaction between business segments and the standardisation of customer platforms. These measures are intended to open up further growth opportunities and efficiency gains.

After a very significant rise in net write-downs of loans and provisions for guarantees and commitments in 2020, which is also to be seen against the backdrop of the COVID-19 pandemic, we project a significant decline for 2021 even if, from today's perspective, we do not expect to return to pre-pandemic levels in 2021.

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. Taking account of non-recurrent effects in 2020, we project a slight recovery in operating income after the previous year's result was weighed down by the effects of the COVID-19 pandemic. For operating costs, we anticipate a development at a stable level. We thus expect a cost-income ratio for 2021 that is almost unchanged compared with 2020. Together with the decline in net write-downs of loans and provisions for guarantees and commitments, the development in operating profit will ultimately lead to a sharp increase in profit before tax if a comparison with the previous year is adjusted for the successfully completed sale of real estate in 2020. At a tax rate that is almost unchanged compared with 2020, this will lead to a very significant rise in profit after tax for 2021 when an adjustment is carried out for the real estate sold in 2020.

We expect the recovery effect, which was already observed in the second half of 2020, to continue in all areas of business particularly in the second half of 2021. The improvement in the profit before tax in 2021 will be mainly attributable to the lower net write-downs of loans and provisions for guarantees and commitments. The improvement in the result of the Corporate & Investment Banking business segment will be due above all to the recovery in net trading income. For the Commercial Banking business segment, a significant increase is projected in commissions generated in the investment and lending business. The result of the Group Corporate Centre business segment will sharply decline following a non-recurrent effect from a successfully concluded legal dispute in 2020. The non-recurrent effect from the successful sale of real estate in 2020 was accounted for in the Other business segment, which has led to a significant decline in the profit before tax compared with the previous year.

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.

Opportunities in terms of future business policy and corporate strategy, performance and other opportunities

The opportunities described below are offset by risks, for example the effects of the COVID-19 pandemic and the consistently low level of interest rates, which can restrict the exploitation of those opportunities and plans. The risks arising from the business policy and corporate strategy are described in the Risk Report.

As a universal bank, HVB Group is a member of one of the largest banking groups in Europe, UniCredit. HVB Group is one of the largest private financial institutions in Germany and has competence for the international markets and investment banking business within UniCredit. HVB Group operates in a domestic market which is the largest in the whole of Europe in terms of economic power and size of population. Moreover, Germany is one of the few countries in the world that continues to enjoy a financial rating of AAA. All in all, HVB Group can thus exploit its regional orientation combined with the international network of a large European banking group.

This gives rise to a number of opportunities:

HVB Group is pursuing a growth strategy in selected business areas by implementing its Team 23 strategic plan, the main focus of which is leveraging productivity and efficiency potentials and creating unique customer experiences. To underpin our growth, we will therefore be investing in further digitalisation, automation and end-to-end process optimisation in the coming years. Furthermore, growth opportunities will be created through greater interaction between the Private Clients Bank, the Unternehmer Bank and CIB, the standardisation of business platforms and cooperation with external partners. At the same time, we will forge ahead with a comprehensive assessment of sustainability and will also make use of the opportunities to cooperate within UniCredit across country and company lines.

In addition, the possible consolidation wave in the banking sector along with the withdrawal of individual competitors from geographical areas and products, which is widely discussed in public, will create new growth opportunities for HVB. Through selective investments, we plan to make better use of our growth potential in individual regions, customer groups and product areas. This will be supported by an adjustment of structures, locations or roles.

HVB Group has opportunities to recruit highly qualified employees and managers. Both the size of UniCredit and the strategic positioning of HVB Group have a beneficial impact on the recruitment of employees and managers. Promoting female managers at junior level is an explicit part of the business strategy.

On account of its capital base, HVB Group is, in our opinion, already well equipped for any tightening of regulatory requirements and can take advantage of the growth opportunities that arise in the market.

The opportunities for the individual business segments are as follows:

Within the Commercial Banking business segment, the Unternehmer Bank business unit is seeking profitable growth and an expansion of market shares in its corporate banking business through its positioning as a principal or core bank and the acquisition of new customers. As a strategic business partner, the Unternehmer Bank supports the entrepreneurial activities of its customers. The most important strategic challenges of customers include, among other things, foreign trade, internationalisation and digitalisation. For this reason, the growth initiatives of the Unternehmer Bank are geared to these customer requirements.

In the Private Clients Bank business unit, we are continuing to pursue our growth strategy following the integration of Wealth Management and Business Customers. In Wealth Management and Private Banking, we intend to establish ourselves as one of Germany's leading providers in the coming years while further accelerating our growth path with upscale retail customers. By shifting the Business Customers segment to the Private Clients Bank, comprehensive customer services in this segment will also focus on the private requirements of entrepreneurs and freelancers in future. Supported by our positioning as a quality provider, we will thus concentrate on growth and on increasing customer loyalty. We are also continuing to fundamentally modernise the Private Clients Bank by adopting an omnichannel business model.

In the CIB business segment, the strategic focus is on expanding and strengthening sustainable and long-term customer relationships. To this end, we will continue to offer advice and product solutions for financing and capital procurement, cash management and investments. We see further business potential in the expansion of the trade finance and working capital business and in an extension and improved use of our international network. To enhance our cross-selling potential, we are intensifying our cooperation with the Commercial Banking business segment. This will enable Mittelstand customers in the Unternehmer Bank to benefit from investment banking solutions and retail customers from an attractive range of CIB's investment products. In addition, we intend to continue making better use of the opportunities afforded by digitalisation.

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 business 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".

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

The income statements for each business segment and comments on their economic performance are provided in the Note "Income statement, broken down by business segment" in the notes to the consolidated financial statements. The contents and objectives of the individual business segments are described in detail in the Note "Components of segment reporting by business segment" and the Note "Method of segment reporting by business 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 risk that a change in the credit rating of a contracting party (borrower, counterparty, issuer or country) induces a change in the value of the corresponding receivables. This change in value may be due to a default by the contracting party, meaning it is no longer in a position to meet its contractual obligations.

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 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.

Risk Report (Continued)

– **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 included in the consolidated financial statements according to IFRS principles 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.

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. Whereas in the planning process for 2020 the first scenario assumes a conventional recession in Germany on account of the trade conflict between the USA and China and the associated cooling in the global economy, the second scenario is based on a disorderly withdrawal of the United Kingdom from the European Union. 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. Adverse planning scenarios are used for the 2021 planning process, taking account of the COVID-19 pandemic.

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. The Senior Risk Management – Centralized Credit Underwriting (SRM) unit and the Credit RR & NRR Germany (KCE) unit are responsible for the operational management of credit risk for the Commercial Banking and Corporate & Investment Banking (CIB) business segments. The senior risk managers and the credit specialists take lending decisions in the defined "risk-relevant business". They thus make it possible for the business 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 business 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 business segments, which the CFO organisation proactively coordinates. The relevant business 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 Report (Continued)

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, real estate risk, pension risk and reputational risk (since the first quarter of 2020). 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.

Divisions and committees

Chief Risk Officer
The controlling and cross-business segment management of risk at HVB Group fall within the competence of the Chief Risk Officer (CRO). This is where all the key functions involved in the identification, analysis, assessment and reporting of risk are performed together with the ongoing tracking, handling, monitoring and controlling of risk. These activities are supported and complemented by various CFO units, notably with regard to liquidity risk.

The CRO organisation is divided into units that deal with lending business in the back office. The main functions of these units include:
- operational functions in the credit-decision and credit-monitoring processes for the risk-relevant lending business, complete with monitoring of the issuer and counterparty limits
- identification and control of risk at the preliminary stages in order to reduce risk
- restructuring activities with a view to minimising losses for the Bank

At the same time, there are units that cover operational and strategic aspects of risk monitoring. Their main functions include:
- the development, enhancement, parameterisation and calibration of the rating models used to determine the probability of our customers defaulting
- validation of Pillar I and II systems for risk measurement that contain the following components: models, associated processes, IT systems and data

- the development of concepts used to identify and control credit risk and concentrations, including country risk
- responsibility for the measurement methods and the refinement of the measurement methods and systems, and for the management and measurement of market risk and liquidity risk
- responsibility for the measurement methods and the refinement of the measurement methods and systems, and for the management and measurement of operational risk as well as responsibility for reputational risk and its management
- the determination of the internal capital and the economic capital base
- ensuring ICAAP compliance, ensuring compliance with the MaRisk rules as part of the responsibility for credit risk and economic capital and the performance of stress tests
- ensuring compliance with regulatory rules regarding internal and external reports
- risk reporting

Chief Financial Officer

The Finance and Regional Planning & Controlling units from the Chief Financial Officer (CFO) organisation play a major role in risk monitoring. The Finance unit notably covers the management of short- and long-term liquidity at HVB Group (Asset Liability Management) acting in concert with the front office units and asset/liability management.

Regional Planning & Controlling (CCP) has been tasked with central business management and cost controlling of HVB. CCP also prepares and validates the internal segment report in accordance with IFRS and has responsibility for the processes involved in preparing the income budgets and the income projections. Furthermore, CCP includes the segment-related controlling departments for all the segments apart from Corporate & Investment Banking (CIB) and Group Corporate Centre (GCC). Controlling for CIB is the responsibility of the CPA unit. This unit carries out the reconciliation of net trading income for markets jointly with Accounting. The reconciliation of net trading income for Treasury is carried out between Accounting (CFF) and Finance (CDF).

Asset Liability Management

The Finance unit controls Asset Liability Management by managing short-term and long-term liquidity within HVB Group. Its main objectives are to ensure that HVB Group has adequate liquidity at all times and to optimise funding costs. Asset Liability Management monitors trends and happenings on the money and capital markets and manages liquidity and funding requirements. As part of liquidity risk management, the Finance unit performs ongoing monitoring of the liquidity risk situation, in addition to the activities on the part of CRO, and manages funding activities together with the front office units. Within the framework of a liquidity cost allocation mechanism for all significant business activities, the internal transfer prices for the lending and deposit-taking activities are continually reviewed for appropriateness and regularly adjusted to reflect the market situation, for instance. The measures implemented in connection with these functions serve to support HVB Group's return targets.

Internal Audit

A number of important tasks regarding the implementation of an efficient risk management system have been entrusted to the Internal Audit department as described in the section entitled "Monitoring the effectiveness of the ICS".

Risk Committee

The Management Board has entrusted the following tasks to the Risk Committee (RC), subject to its management competence and its ultimate decision-making authority at any time:
- development and implementation of suitable policies and methods, especially for credit risk and credit portfolio management together with other risk topics
- discussion of and decision on strategic risk policy issues
  A submission is always made to the Management Board when required for legal reasons (such as to comply with the MaRisk rules).

The RC generally meets once a month.

Risk Report (Continued)

Asset Liability Committee

The Asset Liability Committee (ALCO) makes decisions at its monthly meetings on the asset/liability management of HVB Group. The committee pursues the following key goals:
- establishment of uniform asset/liability management methods for HVB Group
- optimum utilisation of liquidity and capital resources
- coordination between the requirements of the business segments for financial resources and the business strategy

Stress Test Council

The Management Board, as the body responsible for bank management, delegated the topic of stress tests to the RC and the Stress Test Council (STC) as a specialist committee. The tasks of the STC include:
- coordination of all stress-testing activities within HVB Group, including the refinement of the stress-testing methodology
- definition and coordination of cross-risk-type stress test scenarios, including the validation of the underlying parameters
- analysis and presentation of stress-testing results and their use to prepare recommendations for management

Reputational Risk Council

The task of the Reputational Risk Council (RRC) is to assess HVB's reputational risks. It is the decision-making body for all business transactions and other activities that give rise to a reputational risk to HVB. Such activities include those relating to:
- projects and outsourcing activities
- the development of new products and the exploitation of new markets
- special purpose vehicles

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 communications 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 business 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 various 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.

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 business 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 business 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 business 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 business 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 business 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 12.45%. 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 was 22.5% at 31 December 2020 (31 December 2019: 18.1%).

Risk Report (Continued)

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.

In addition, the group-wide quantification method for calculating the economic capital of reputational risk was implemented in the first quarter of 2020. The reputational risk contribution is included in the calculation of the ICAAP to determine the aggregate economic capital.

Since September 2020, financial investment risk and the risk entailed in small legal entities have been included under credit risk. For this reason, economic capital is not shown separately for financial investment risk or for the risk entailed in small legal entities from the third quarter of 2020. Since September 2020, pension risk has been included in the calculation of economic capital in the form of an additive component under market risk before aggregation as internal capital.

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%)

	31/12/2020		31/12/2019	
Broken down by risk type	**€ millions**	**in %**	**€ millions**	**in %**
Credit risk	3,109	45.0	3,248	46.1
Market risk	1,858	26.9	1,617	23.0
Pension risk[1]	851	12.3	—	—
Operational risk	472	6.8	412	5.9
Real estate risk	181	2.6	322	4.6
Business risk	239	3.5	354	5.0
Reputational risk	42	0.6	—	—
Aggregated economic capital	**6,751**	**97.8**	**5,952**	**84.6**
Pension risk[1]	—	—	615	8.7
Financial investment risk[2]	—	—	222	3.2
Model risk cushion	152	2.2	158	2.2
Economic capital of small legal entities[2]	—	—	91	1.3
Internal capital of HVB Group	**6,903**	**100.0**	**7,038**	**100.0**
Available financial resources of HVB Group	**17,403**		**16,061**	
Risk-taking capacity of HVB Group, in %		**252.1**		**228.2**

Contains rounding differences.
1 Since September 2020 in the form of an additive component under market risk before aggregation.
2 Since September 2020 included in credit risk.

Internal capital fell by €135 million in comparison to 31 December 2019. Applying the current method/model retrospectively to the reference date of 31 December 2019 would result in internal capital of €6,680 million (with model risk cushion).

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

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

	31/12/2020		31/12/2019	
Broken down by business segment	**€ millions**	**in %**	**€ millions**	**in %**
Commercial Banking	1,379	23.4	1,478	23.6
Corporate & Investment Banking	4,201	71.2	4,302	68.7
Group Corporate Centre	85	1.4	166	2.6
Other	235	4.0	319	5.1
Consolidation	—	—	—	—
Internal capital (without pension risk and without the model risk cushion) of HVB Group	**5,900**	**100.0**	**6,265**	**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 subdivided into the categories of "Pillar I", "commercial" and "specific risks". 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. and HVB have been identified as systemically important at a global level and at a national level, respectively. 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 Report (Continued)

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 €17,403 million as at 31 December 2020 (31 December 2019: €16,061 million).

With internal capital (including the model risk cushion) of €6,903 million, the risk-taking capacity for HVB Group is 252.1% (31 December 2019: 228.2%). This figure is higher than the target of 170% HVB Group set itself in the 2020 risk appetite framework. The rise of 23.9 percentage points in comparison with 31 December 2019 for HVB Group is attributable to growth of €1,342 million or 8.4% in available financial resources in 2020. The internal capital has fallen by €135 million or 1.9%. The increase in available financial resources is largely due to a change in core capital, which was partly offset by a reduction in the expected future profit.

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 until the end of March 2020:
– Contagion scenario – focusing on the political tensions within the EU
– Historical scenario – based on the 2009 financial crisis
– Financial Intermediary scenario – a second, stricter variant of the historical scenario additionally reflects the default by the financial intermediary with the highest stressed counterparty risk exposures
– Protectionism scenario – protectionism, China slowdown and Turkey shock
  This scenario considers the introduction of a policy of protectionism in the USA that throttles growth in China in conjunction with a growth shock in Turkey
– Recession scenario – recession in Germany due to a massive decline in global demand
– US Hard Landing and Hard Brexit – recession in the USA and the UK leaves the EU without a departure agreement

Taking account of the current macroeconomic developments, particularly in view of the COVID-19 pandemic, the aforementioned downturn scenarios and the underlying baseline scenario were reviewed, and the corresponding macroeconomic parameters and market parameters were adjusted.

The following scenarios were calculated from the second half of 2020:
– 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) – 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.

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.

Risk Report (Continued)

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 of 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 the risk types, such that concentration risk is integrated into the assessment and controlling functions.

The concentration of earnings at individual customers, business 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 February 2020. The 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. The outcome of the 2020 risk inventory was presented to the Risk Committee and HVB's Management Board in September 2020 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 business segments, countries or industries.

Risk types in detail

1 Credit risk

Credit risk consists of the following categories:
– credit default risk (including counterparty risk and issuer risk)
– country risk

Categories

Credit default risk

Credit default risk is considered to occur with regard to a specific contracting party when one or both of the following criteria are satisfied:

– The Bank assumes the contracting party is probably not in a position to meet its entire contractual obligation towards HVB Group, without having to take recourse to measures like the sale of collateral (where present).
– The contracting party is more than 90 days in arrears in terms of a material receivable of HVB Group.

Credit default risk also encompasses counterparty risk and issuer risk.

Counterparty risk

Counterparty risk arises from the possible loss of value due to the default of the counterparty in trading activities (such as derivatives involving interest rates, foreign exchange, equities/indices, or other futures or derivative contracts). It is divided into the following components:
– settlement risk
– pre-settlement risk
– money market risk (cash risk)

Issuer risk

Issuer risk is defined as credit default risk in the securities holding resulting from the downgraded credit rating or default of an issuer that can lead to a loss of value through to total loss. Issuer risk arises from the purchase of securities, securities issuance activities, credit derivatives and the placement of securities.

Country risk

Country risk is the risk of losses caused by events attributable to actions by the government of a given country. This includes the repayment of capital in a specific country being prevented by government intervention, which gives rise to various risks (such as transfer risk, expropriation risk, legal risk, tax risk, security risk). It also includes the risk of repayment of capital being prevented by a deterioration in the economic and/or political environment (such as through recession, a currency and/or banking crisis, natural disasters, war, civil war, social unrest). Country risk encompasses:
– sovereign risk (state as counterparty)
– transfer and conversion risk

Strategy

A risk strategy has been approved for HVB Group that operationalises the strategic controlling of credit risk. This is done by setting targets and limits for different metrics as needed. Controlling using economic capital, together with volume and risk metrics, is particularly important in this regard. The planning of the targets and limits is embedded in HVB Group's annual plan, similarly taking into account ceilings arising from the requirements regarding the capital base. Firstly, the limits are intended to leave scope for implementation of the business planning and, secondly, to set upper limits, specifically with regard to economic capital.

Risk Report (Continued)

Systematic controlling and setting of limits for credit risk are essential for sustaining HVB Group's strategic orientation. The risk strategy is intended to make it possible for both the sales controlling and risk management functions to back transactions with concrete, measurable criteria in order to optimise the risk profile of the credit portfolio. To achieve this, the expected and unexpected losses of a given borrower are determined. These form the basis for drawing up limits and in some cases target portfolios for the different risk types, exposures and risk metrics.

The Industry Credit Risk Strategy includes an assessment of the opportunities and risks for every industry, from which controlling signals and quantitative ceilings for new business are derived.

Limit system
The credit risk strategy defines limits for risk metrics and risk types for individual portfolios. These are allocated at the following levels:
– HVB Group
– HVB and subsidiaries, or groups of subsidiaries of HVB Group
– business segments of HVB Group and HVB
– products and special portfolios (such as Leverage and Project Finance and shadow banking entities)

The following criteria are analysed with regard to the performing portfolio: exposure, expected loss and risk density. An overshooting of the limits is generally not permitted.

In order to avoid concentrations of risk in credit default risk, the following concentration limits and, where appropriate, target portfolios are used for controlling purposes:
– single-name concentrations
– industry concentrations
– concentration limits for countries and regions

The utilisation of the individual limits is classified using a traffic light system:
– green: limit utilisation is below a defined trigger
– yellow: limit utilisation is below the limit but above the defined trigger
– red: limit utilisation is above the limit

If a limit or a trigger is exceeded, an escalation process is initiated to eliminate the overshooting or prevent an overshooting of the limit in the event that a trigger is exceeded. The corresponding responsibilities are defined in the escalation process to ensure the permanent controlling effect of the limits.

Credit risk mitigation
In new lending, HVB pursues the strategy of applying loan collateral that would present an economic benefit to the Bank in the event of default.

For the reduction of credit risk, only such collateral is used as meets the requirements of the Advanced Internal Ratings Based (A-IRB) approach in accordance with Basel III.

Methods have been implemented to value collateral that meet the requirements of Basel III. Empirically determined ratios for realisation proceeds and costs are employed in the valuation together with realisation periods. The land charges are calculated using a statistical model to update the current and forecast fair values at the time of realisation. The fair values are adjusted on an annual basis to reflect the market developments actually observed, and the forecast is reviewed and, where necessary, adjusted. Special simulation methods for valuing collateral have been devised for collateral types with a low default history. In the case of securities, HVB resorts to its own haircut calculations based on historical data. In addition, collateral is taken into account using a substitution approach if permissible under the CRR.

The most significant collateral types in terms of value in the lending business are land charges, guarantees and pledges of financial collateral, which together account for approximately 90% of all valued collateral.

In trading activities, over-the-counter (OTC) derivatives, security financing transactions (SFTs) and exchange-traded derivatives (ETDs) are hedged on the basis of the respective contractual provisions with the counterparties. In the case of OTCs, these are the International Swaps and Derivatives Association (ISDA), the German Master Agreement for Derivatives (Deutscher Rahmenvertrag für Finanztermingeschäfte – DRV) and the Credit Support Annex (CSA, appended to an ISDA master agreement) or BRV (appended to a DRV master agreement). In the case of SFTs, these are the Global Master Repurchase Agreement (GMRA) or the Global Master Securities Lending Agreement (GMSLA). For credit risk reduction, only collateral recognised as eligible under the CRR is permitted for regulatory purposes. Internally, the collateral policy defines conditions for accepting collateral in trading activities. The back office has a consultation and veto right in this regard. Collaterals from the trading business are measured on the basis of current market prices. The counterparty risk exposure is forecast using a refined internal model for predicting the amount of collateral needed and the value of the collateral provided (simulation method).

Measurement

We use the following risk measurement methods and metrics to assess our credit risk.

Probability of default (PD)

The internal customer-segment-specific rating and scoring methods of HVB Group that are available for all significant credit portfolios form the basis for the measurement of credit default risk. The reliable determination of our customers' PDs is critical for credit decisions, pricing and core capital backing under Basel III (A-IRB model) as well as for the internal credit risk model.

The PDs determined on the basis of the rating and scoring methods lead to allocation to a rating class on a ten-point scale. The rating classes 1 to 7 are set aside for performing loans and the rating classes 8 to 10 for non-performing loans, with the rating classes 8–, 9 and 10 representing default classes.

In contrast to ratings at customer level for which the customer represents the risk for the Bank, in the case of a transaction rating the risk relates to the transaction. In this instance, the customer is not considered the risk-bearing entity; the individual transaction is rated with its clearly specified risk instead. Typical examples for which transaction ratings are applied are structured loans and securitisations.

Loss given default (LGD)

The LGD indicates what proportion of the underlying portfolio of receivables would almost certainly be lost in the event of a default. The expected proceeds from the collateral used to reduce credit default risk have a major influence on the amount of the LGD. At the same time, the amount of the LGD is determined by borrower-related criteria. The reliable determination of our customers' LGD is critical for credit decisions, pricing, core capital backing under Basel III (A-IRB model) and our internal credit risk model.

Risk Report (Continued)

Exposure at default (EAD)
The EAD is the expected amount of the receivable at the time of default. It covers current arrears together with the probable future utilisation by the borrower. These probable future utilisations are determined on the basis of historical data and validated on an annual basis. Off-balance-sheet exposures such as unused, externally committed credit lines are also employed as the reference point for the EAD parameters. The EAD parameters are also incorporated in the credit decision, pricing, core capital backing under Basel III (A-IRB model) and the internal credit risk model.

The credit-risk-oriented calculation of exposures and limits is also carried out for issuer risk. This involves calculating a fair-value-oriented exposure for the individual positions in the trading book, which shows and limits the maximum potential fair value loss without taking account of residual values. A credit-risk-oriented, nominal-value-based exposure is used to limit the banking book and asset-backed security (ABS) positions. Netting effects are taken into account when the limits are set.

In terms of counterparty risk, a simulation method is used to determine future exposure figures for the pre-settlement risk within the scope of an internal model. The default conditional metric used in the internal model to determine the future exposures makes it possible among other things to incorporate the correlation effects between market risk and credit risk, and notably the specific wrong-way risk. The simulation is carried out for up to 50 future dates on the basis of 3,000 market data scenarios for each calculation date.

Expected loss (EL, standard risk costs)
The expected loss shows the credit default losses to be expected from the credit portfolio over the next 12 months, taking into account the current ratings and collateral on hand. Among other things, it is used for risk identification, as both an absolute and a relative value, in pricing, for profitability calculations and for limitation purposes.

Risk density
The risk density is another risk metric alongside the EAD and expected loss that is used to manage the individual HVB Group sub-portfolios. HVB Group calculates the risk density as the ratio of expected loss to performing exposure in basis points (bps). It indicates the development of risk in a given portfolio.

Unexpected loss (economic capital, EC)
The economic capital measures the amount of capital required to cover the unexpected loss beyond the expected loss, which, with a probability of 99.90%, will not be exceeded over the next 12 months. This risk metric makes the risk content of the various sub-portfolios comparable, taking into account the concentration risks in the portfolio. It is also used in pricing and the Bank's risk-adjusted profitability calculations.

Internal credit risk model
HVB Group has been using the credit portfolio model used throughout UniCredit to measure the economic capital of credit risk. The group model follows the structural Merton approach under which correlations between the borrowers are mapped using a multi-factor model, taking into account fluctuations in value arising from rating changes (migration risk) for certain sub-portfolios as well as the pure credit default risk.

The credit portfolio model covers all banking book positions and counterparty risks arising from derivative positions that are relevant pursuant to the definition of credit risk. Issuer risk from the trading book continues to be recorded using the incremental risk charge (IRC) model, which forms part of the market risk in the presentation of the ICAAP.

Country risk is integrated using appropriate PD add-ons. Risk-reducing factors are included by applying reductions to the LGDs and PDs.

Risk-based and market-oriented pricing
Pricing methods and tools are used to manage risk and profitability in the lending business that take into account all cost components – in particular the expected standard risk costs and the cost of capital – and that are each adjusted to reflect the current parameters and bank management. Lending decisions are made under risk/return considerations that are determined in the obligatory pre-calculation prior to a transaction being concluded.

Monitoring and controlling
Risk monitoring takes place at the level of individual exposures. In addition, various instruments are used at portfolio level.

Individual exposures are monitored in both lending and trading operations with the aid of classical monitoring systems, such as rating analysis and early warning systems. Individual exposure limits are also defined in line with the probability of default to limit the risks entered into. Monitoring and reporting of any limit overshootings takes place on a monthly basis.

Special features of counterparty risk and issuer risk
We employ limit systems as a key element of the management and controlling of counterparty risk as well as issuer risk to prevent an increase in our risk position that does not comply with the strategy. Each new trade is entered and applied to the corresponding limit without delay (the same day). The pre-settlement risk is established on the basis of an internal model method (IMM) and is recognised by the banking supervisory authorities for calculating capital requirements. To reduce counterparty risk relating to financial institutions, HVB Group uses derivative exchanges in its function as a central counterparty.

Quantification and specification
The economic capital for credit risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk cushion, amounts to €3,301 million, which is €105 million lower than the total reported value as at 31 December 2019 (€3,406 million). The financial investment risk from holdings in unlisted companies has been included in credit risk since September 2020.

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

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

The remaining exposures assigned to the former Real Estate Restructuring business 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 €19 million (31 December 2019: €29 million).

Risk Report (Continued)

Development of metrics by business segment

Broken down by business segment	EXPECTED LOSS[1] € millions 31/12/2020	EXPECTED LOSS[1] € millions 31/12/2019	RISK DENSITY[2] in bps 31/12/2020	RISK DENSITY[2] in bps 31/12/2019	ECONOMIC CAPITAL[3] € millions 31/12/2020	ECONOMIC CAPITAL[3] € millions 31/12/2019
Commercial Banking	202	169	19	16	1,119	1,032
Corporate & Investment Banking	136	130	8	9	2,164	2,373
Group Corporate Centre	0	0	10	11	17	0
Other	1	0	371	12	1	1
Consolidation	—	—	—	—	—	—
HVB Group	**339**	**299**	**13**	**12**	**3,301**	**3,406**

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 since September 2020.

In 2020, the expected loss of HVB Group increased by €40 million and risk density by 1bp.

The main contributor to this development was the Commercial Banking business segment, where the expected loss rose by €33 million and risk density by 3bps. This increase can be observed in many industry groups, such as in the machinery, metal, food, beverages, chemicals, pharma, healthcare and automotive industries.

The rise of €6 million in the expected loss in the CIB business segment is likewise attributable to several industries, especially tourism, which was particularly affected by the impact of the COVID-19 pandemic.

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

(€ millions)

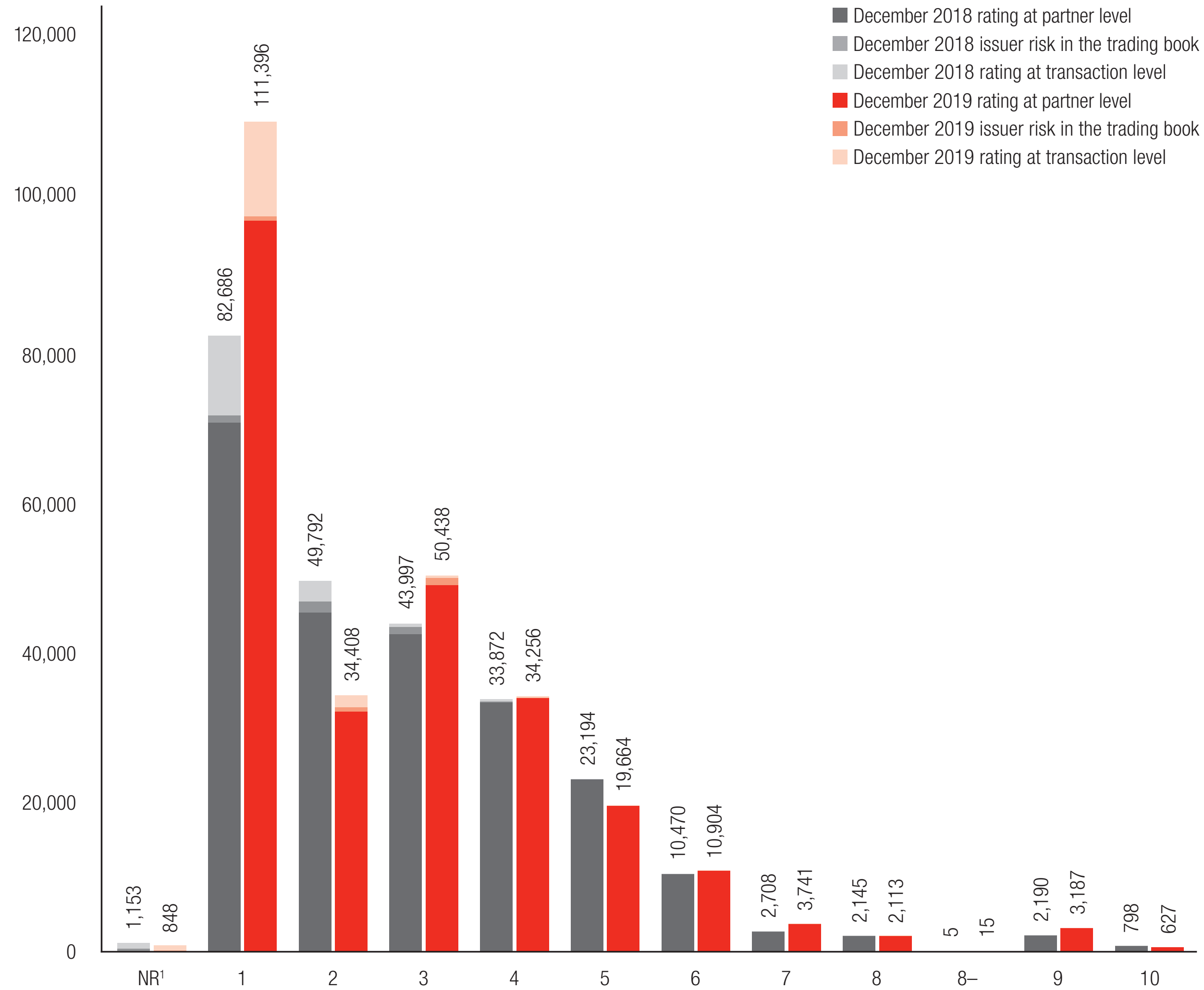
Broken down by business segment	CREDIT DEFAULT RISK EXPOSURE 31/12/2020	CREDIT DEFAULT RISK EXPOSURE 31/12/2019	OF WHICH COUNTERPARTY RISK 31/12/2020	OF WHICH COUNTERPARTY RISK 31/12/2019	OF WHICH ISSUER RISK IN BANKING BOOK 31/12/2020	OF WHICH ISSUER RISK IN BANKING BOOK 31/12/2019	OF WHICH ISSUER RISK IN TRADING BOOK 31/12/2020	OF WHICH ISSUER RISK IN TRADING BOOK 31/12/2019
Commercial Banking	106,158	104,115	3,240	3,332	—	—	—	—
Corporate & Investment Banking	165,320	148,802	20,762	19,276	44,905	42,520	2,305	4,097
Group Corporate Centre	105	12	16	5	6	6	—	—
Other	14	97	—	—	—	—	—	—
Consolidation	—	—	—	—	—	—	—	—
HVB Group	**271,597**	**253,026**	**24,018**	**22,613**	**44,911**	**42,526**	**2,305**	**4,097**

HVB Group's credit default risk exposure increased by €18,571 million in 2020.

The largest share of this is attributable to the CIB business segment where the exposure rose by €16,518 million, notably as a result of the liquidity reserves built up at Deutsche Bundesbank. There has also been a rise in the exposure with large corporate customers, partly due to the demand for credit lines to ensure liquidity, in addition to greater exposure based on active liquidity management.

In the Commercial Banking business segment, exposure rose by €2,043 million in the private customers, telecommunication and IT industry groups, among others. The increase in exposure in the Commercial Banking business segment was also influenced by our customers' use of the support programmes set up by development institutions such as the KfW.

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



1 Not rated.

The rating structure of HVB Group changed in the course of 2020, primarily as a result of the development of exposure in the financial institutions (including foreign sovereigns) and public sector (including German sovereign) industry groups.

The greatest change is to be seen in rating class 1 where exposure rose by €28,710 million. This is mainly attributable to the liquidity reserves built up at Deutsche Bundesbank.

Furthermore, the increase in non-performing exposure (rating class 8– to 10) reflects the impact that the COVID-19 pandemic is having on our customers.

Risk Report (Continued)

Development of metrics by industry group

Broken down by industry group	CREDIT DEFAULT RISK EXPOSURE € millions 2020	2019	OF WHICH ISSUER RISK IN TRADING BOOK € millions 2020	2019	EXPECTED LOSS[1] € millions 2020	2019	RISK DENSITY[2] in bps 2020	2019
Financial institutions								
(incl. foreign sovereigns)	84,117	67,324	1,819	3,257	27	36	3	6
Real estate	27,383	27,416	39	64	28	26	10	10
Public sector (incl. German sovereign,								
excl. public service companies)	24,425	21,629	64	31	—	—	—	—
Special products	15,482	15,361	—	—	5	13	3	8
Energy	12,841	12,070	58	96	13	14	10	12
Chemicals, pharma, healthcare	10,812	11,838	44	141	28	24	26	21
Machinery, metals	10,800	13,097	25	66	34	23	32	18
Automotive	9,153	8,683	45	100	15	12	18	14
Food, beverages	7,313	8,130	20	30	13	9	18	11
Construction, building materials	6,691	6,671	5	17	12	9	18	13
Transport, travel	6,391	5,121	34	41	14	12	23	27
Services	5,701	5,983	37	51	20	16	37	29
Consumer goods	5,072	5,047	8	15	24	15	48	31
Telecommunication, IT	4,693	5,224	50	105	6	9	14	19
Electronics	3,348	3,116	16	26	5	4	15	12
Agriculture, forestry	3,010	3,051	—	—	8	7	27	23
Tourism	2,896	2,453	—	5	21	3	92	15
Media, paper	2,281	2,426	4	23	8	4	35	19
Shipping	2,062	2,561	—	—	11	16	61	77
Textile	1,654	1,538	1	7	6	5	43	32
Private customers	24,124	23,143	—	—	38	40	16	17
Public service companies	1,304	1,111	11	18	2	2	16	14
Others	44	34	25	4	1	—	294	21
HVB Group	**271,597**	**253,026**	**2,305**	**4,097**	**339**	**299**	**13**	**12**

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%.

There have been some changes in the way industries are presented. Now the industry groups of food, beverages, agriculture, consumer goods, textile and public service companies are shown separately, whereas the machinery and metals industry groups have been combined into a single group.

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 €16,793 million as at 31 December 2020 compared with the previous year. This development is largely attributable to the liquidity reserves built up at Deutsche Bundesbank.

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 31 December 2020 decreased slightly year on year by €33 million, whereby the expected loss increased marginally compared with the previous year's level (up €2 million to €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. The effects of the COVID-19 pandemic are taken into account in the lending process (e.g. by taking these into account in the internal reports and in loan applications).

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 (including German sovereign) industry group, exposure increased by €2,796 million in 2020. This increase is essentially attributable to HVB's own 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).

Exposure was kept stable at €15,482 million in the special products industry group in 2020 compared with 2019 despite the COVID-19 pandemic. In this context, the focus remained on customer-related securitisations, which was also in line with the 2020 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. The expected loss and the risk density continued to decrease compared with 2019 and amount to €5 million or 3bps respectively compared with 2019.

Energy
Exposure in the energy industry group increased by €771 million in 2020.

For new business in the energy industry, we focus on large international companies with strong credit ratings as defined in the risk strategy. Project loans in the area of renewable energy were also in line with the 2020 risk strategy and financing standards, which helped to improve portfolio quality overall with an expected loss of €13 million and a risk density of 10bps.

Risk Report (Continued)

Exposure development of countries/regions

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

Development of credit default risk exposure of eurozone countries

(€ millions)

	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
Broken down by eurozone countries	2020	2019	2020	2019
Germany	181,352	150,953	402	848
Italy	10,023	10,340	530	789
France	9,153	9,040	235	437
Ireland	8,181	7,686	16	27
Spain	7,443	7,306	53	200
Luxembourg	5,118	4,884	59	60
Netherlands	3,833	4,481	55	91
Austria	1,848	1,995	264	341
Belgium	512	1,745	15	37
Finland	293	346	1	20
Greece	116	181	—	—
Cyprus	54	77	—	1
Portugal	34	38	6	4
Estonia	16	6	—	1
Lithuania	15	11	13	10
Slovenia	14	23	2	6
Slovakia	5	3	3	—
Malta	—	21	—	—
Latvia	—	1	—	1
Supranational organisations and multilateral banks	2,532	3,100	71	283
HVB Group	**230,542**	**202,237**	**1,725**	**3,156**

Italy

The size of the portfolio results from HVB'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 2020	CREDIT DEFAULT RISK EXPOSURE 2019	OF WHICH ISSUER RISK IN TRADING BOOK 2020	OF WHICH ISSUER RISK IN TRADING BOOK 2019
USA	9,573	11,840	123	320
UK	8,158	10,522	44	125
Japan	5,777	6,424	—	3
Switzerland	4,887	6,705	107	205
Asia/Oceania (without Japan, China, Hong Kong)	2,739	3,822	1	3
Western Europe (without Switzerland, UK)	2,120	2,243	44	80
China (including Hong Kong)	1,962	1,622	—	—
CIS/Central Asia (without Turkey)	1,214	1,319	63	31
Near Middle East	1,077	1,536	—	—
Eastern Europe (without euro countries)	882	809	153	146
Turkey	818	1,396	2	5
Africa	810	1,266	0	1
North America (including offshore jurisdictions, without USA)	556	737	43	4
Central/South America	483	548	0	18
Without country classification	—	—	—	—
HVB Group	**41,056**	**50,789**	**580**	**941**

In 2020, the total exposure to countries/regions outside the eurozone fell by €9,733 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 31 December 2020 totalled €99.6 billion (31 December 2019: €76.0 billion). The year-on-year rise of €23.6 billion is primarily attributable to OTC interest rate swaps (€19.5 billion), cross-currency swaps (€2.0 billion) and exchange-traded equity/index options (€1.6 billion).

In accordance with the regulatory provisions under CRR as well as 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 €5.1 billion as at 31 December 2020 (31 December 2019: €4.1 billion).

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.

Risk Report (Continued)

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	2020	2019	2020	2019	2020	2019
Interest rate derivatives	**1,189,017**	**1,375,031**	**1,359,098**	**3,923,146**	**3,291,999**	**81,822**	**63,825**	**75,765**	**59,248**
OTC products									
Forward rate agreements	325,946	1,034	—	326,980	248,732	21	29	23	34
Interest rate swaps	756,276	1,226,030	1,241,415	3,223,721	2,712,209	77,716	58,170	69,689	54,009
Interest rate options									
– purchased	18,036	53,813	53,830	125,679	113,786	3,825	5,178	235	404
– written	13,782	68,611	63,853	146,246	132,910	229	406	5,817	4,778
Other interest rate derivatives	54,014	4	—	54,018	36,579	30	41	1	23
Exchange-traded products									
Interest rate futures	20,652	9,805	—	30,457	47,522	—	—	—	—
Interest rate options	311	15,734	—	16,045	261	1	1	—	—
Foreign exchange derivatives	**213,708**	**32,022**	**2,996**	**248,726**	**270,161**	**3,318**	**2,694**	**3,006**	**2,742**
OTC products									
Foreign exchange forwards	167,041	19,564	2,967	189,572	201,518	2,579	2,165	2,420	2,195
Foreign exchange options									
– purchased	22,151	5,939	16	28,106	34,536	334	221	240	269
– written	24,076	6,519	13	30,608	33,971	303	262	346	278
Other foreign exchange derivatives	338	—	—	338	86	102	46	—	—
Exchange-traded products									
Foreign exchange futures	102	—	—	102	50	—	—	—	—
Foreign exchange options	—	—	—	—	—	—	—	—	—
Cross-currency swaps	**39,441**	**102,527**	**51,365**	**193,333**	**200,351**	**6,227**	**4,262**	**5,024**	**4,080**
Equity/index derivatives	**97,809**	**61,075**	**15,631**	**174,515**	**130,713**	**6,448**	**4,423**	**5,410**	**3,746**
OTC products									
Equity/index swaps	4,519	2,046	844	7,409	9,643	458	280	276	285
Equity/index options									
– purchased	2,564	2,738	2,044	7,346	7,687	194	191	53	49
– written	28,795	10,038	8,126	46,959	29,539	260	140	663	828
Other equity/index derivatives	26,562	59	2	26,623	15,075	1,681	1,519	—	—
Exchange-traded products									
Equity/index futures	9,702	5,493	936	16,131	18,660	—	—	—	—
Equity/index options	25,264	39,991	3,608	68,863	48,601	3,855	2,293	4,418	2,584
Equity swaps	403	710	71	1,184	1,508	—	—	—	—
Credit derivatives[1]	**2,698**	**6,328**	**460**	**9,486**	**12,474**	**82**	**101**	**290**	**235**
Other transactions	**8,666**	**7,114**	**644**	**16,424**	**15,209**	**1,709**	**736**	**1,768**	**853**
HVB Group	**1,551,339**	**1,584,097**	**1,430,194**	**4,565,630**	**3,920,907**	**99,606**	**76,041**	**91,263**	**70,904**

1 For details of credit derivatives, please see the tables "Credit derivatives" and "Credit derivatives by reference asset" below.

Derivative transactions with a residual maturity of up to three months accounted for a nominal total amount of €826,934 million as at 31 December 2020 (of which credit derivatives on a prorata basis: €444 million).

Derivative transactions by counterparty type

(€ millions)

	FAIR VALUE			
	POSITIVE		NEGATIVE	
	2020	2019	2020	2019
Central governments and central banks	11,750	9,232	1,364	1,276
Banks	50,363	38,962	51,357	40,755
Financial institutions	32,588	24,690	34,619	26,424
Other companies and private individuals	4,905	3,157	3,923	2,449
HVB Group	**99,606**	**76,041**	**91,263**	**70,904**

Credit derivatives

(€ 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	2020	2019	2020	2019	2020	2019
Banking book	**55**	**125**	**10**	**189**	**85**	**—**	**—**	**8**	**10**
Protection buyer									
Credit default swaps	55	125	10	189	82	—	—	8	10
Total return swaps	—	—	—	—	—	—	—	—	—
Credit-linked notes	—	—	—	—	3	—	—	—	—
Protection seller									
Credit default swaps	—	—	—	—	—	—	—	—	—
Total return swaps	—	—	—	—	—	—	—	—	—
Credit-linked notes	—	—	—	—	—	—	—	—	—
Trading book	**2,643**	**6,203**	**450**	**9,297**	**12,389**	**82**	**101**	**282**	**225**
Protection buyer									
Credit default swaps	1,181	3,395	92	4,671	5,507	6	12	109	78
Total return swaps	511	346	45	901	972	2	18	157	128
Credit-linked notes	4	27	12	43	145	—	3	—	1
Protection seller									
Credit default swaps	947	2,415	301	3,662	5,692	74	68	16	15
Total return swaps	—	—	—	—	—	—	—	—	—
Credit-linked notes	—	20	—	20	73	—	—	—	3
HVB Group	**2,698**	**6,328**	**460**	**9,486**	**12,474**	**82**	**101**	**290**	**235**

Credit derivatives by reference asset

(€ millions)

	NOMINAL AMOUNT				
	CREDIT DEFAULT SWAPS	TOTAL RETURN SWAPS	CREDIT-LINKED NOTES	TOTAL 2020	TOTAL 2019
Public sector bonds	578	—	—	578	2,488
Corporate bonds	7,783	406	8	8,197	8,834
Equities	—	—	—	—	—
Other assets	161	495	55	711	1,152
HVB Group	**8,522**	**901**	**63**	**9,486**	**12,474**

Risk Report (Continued)

Single-name credit derivatives make up 39.5% of the total; multi-name credit derivatives, relating notably to baskets or indices, account for a share of 60.5%.

Stress tests

By carrying out stress tests in the credit portfolio, credit risk managers obtain information on a quarterly basis about the possible consequences of a negative change in the underlying economic conditions in addition to the monthly analysis of the real portfolio development. The focus here is on the risk metrics of risk-weighted assets, expected loss and economic capital, and the changes in the portfolio quality. Concentration stress tests, ad hoc stress tests and inverse stress tests are carried out alongside the stress tests based on macroeconomic scenarios (results of which are included in the cross-risk-type stress analysis, among other analyses).

2 Market risk

Categories

We define interest rate risk as the risk of values changing on account of fluctuations in interest rates.

Foreign currency risk arises from fluctuations in exchange rates.

Stock and commodity risk is defined as the risk arising from changing rates on the stock and/or commodity markets.

We define the credit spread as the premium on the interest rate compared with a risk-free investment. Fluctuations in the credit spread give rise to credit spread risk.

The risk that results from changes in volatilities is subsumed in option risk.

Strategy

Market risk essentially arises in the CIB business segment. As was already the case in previous years, the focus in 2020 was again on customer transactions.

One part of the market risk is entailed in trading books while the other part – mainly invested in interest-bearing securities – lies in strategic investments or in liquidity reserve portfolios. All positions exposed to market risk are subject to corresponding limits.

Limit system

All market risk-bearing transactions of HVB Group recognised at fair value are aggregated every day to form value-at-risk (VaR) metrics and set against the risk limits for internal control purposes.

In accordance with the 2020 risk strategy, a new framework for managing market risk limits has been implemented. The main purpose of this new framework is to focus on the fluctuation of the values in profit and loss accounting. VaR limits are set for items recognised at fair value through profit or loss (FVTPL) and for items recognised at fair value through other comprehensive income (FVOCI). The risk limits are approved annually by the Management Board of HVB and adjusted as required. Both groups of limits are equally binding and compliance with them is equally enforceable.

When the 2020 risk strategy was adopted, the FVTPL limit for HVB Group was set at €54 million and the FVOCI limit at €25 million.

Monitoring of the regulatory metrics stressed VaR and incremental risk charge to be used additionally for the internal market risk model is ensured by setting limits for the risk values that are reported on a weekly basis.

Alongside management using the VaR approach, the risk positions of key units are restricted by an additional bundle of granular limits. These limits relate to sensitivities, stress test results and nominal volumes in various risk classes.

Measurement
The VaR shows the maximum expected loss caused by market price fluctuations that with a certain probability (confidence level) will not be exceeded over a given period. We use a confidence level of 99.00% and a holding period of one day for internal risk reports, management and risk limits.

We use a historical simulation to calculate the VaR. This simple method makes it possible to calculate the VaR without having to make any fundamental assumptions regarding the statistical distribution of the movements in the portfolio value. It encompasses the generation of the hypothetical distribution of earnings (gains and losses) from a portfolio of financial instruments directly using the historical market price fluctuations of the last 250 days.

HVB Group has defined several further market risk metrics under the current CRR rules for risk management as well as the VaR:
– The stressed VaR is calculated in the same way as the VaR, although the 12-month observation period has been selected covering the most significant negative market changes for HVB's trading portfolio. The amount calculated for the regulatory report relates to a holding period of ten days and a confidence level of 99.00%.
– The incremental risk charge (IRC) for credit-risk-sensitive positions is the internal approach used to determine the specific risks (specific price risk for net interest positions). This includes credit default risk and migration risk, meaning that both the change in ratings (migration) and the potential default on a credit product are taken into account. The calculated amount for both regulatory and internal reporting relates to a holding period of one year and a confidence level of 99.90%.
– In addition, further risks not taken account of in the internal market risk model are covered by the regulatory standard approach. This essentially relates to the specific risk entailed in securitisations and risk positions in the form of units in undertakings for collective investment (UCI) and as of December 2019, risks arising from shares and indices caused by implicit fluctuations in the repo rate.
– Based on the CRR regulations, we calculate risks with regard to the credit valuation adjustment (CVA). The CVA risk shows the risk of losses in value based on changes in the expected counterparty risk for all relevant OTC derivatives under CRR. We use our own internal model to calculate the vast majority of the CVA. For the regulatory report, the internal model calculates both the CVA VaR and the stressed CVA VaR on the basis of a 10-day holding period and a confidence level of 99.00%.

Monitoring and controlling
The market risk positions recognised at fair value are monitored using a hierarchical limit system that restricts the potential loss from market risk. This involves restricting the VaR totals from FVTPL and FVOCI positions by setting appropriate limits.

The VaR figures are reported daily along with the limit utilisation and the profit and loss figures (P/L) to the Management Board member responsible and the persons responsible in the CIB business segment. Whenever limits are exceeded, an escalation process is triggered immediately and the reduction of the positions in question monitored.

Risk Report (Continued)

The Market Risk Management department has direct access to the front-office systems used in trading operations. The monitoring of trading activities comprises prompt allocation to credit risk limits and detailed validation and coordination of the P/L on the following day. In this context, both the daily changes in the market price risk profile and the P/L generated from new business are calculated.

In addition to the daily reports, the management is informed on a weekly and monthly basis about the results of the risk analysis, including the results of back-testing and stress tests as well as sensitivity ratios.

HVB Group calculates economic capital on the basis of the assumption that operations will continue (continuity of operations). To calculate and allocate the economic capital requirements for market risk, the hypothetical distribution used to determine the VaR is based on an observation period of 500 trading days, in which connection only interest rate movements are taken into account for positions carried at cost. Any hedge effect of the model book for own funds is not included. The results from the credit valuation adjustment (CVA) and funding valuation adjustment (FVA) risk are added to this hypothetical distribution, whereby the FVA risk is derived from the expected future funding costs of derivative transactions. Furthermore, market risks are also added that arise from the Incremental Default Risk Charge (IDRC), which in contrast to the regulatory IRC approach only takes account of issuer default, the market risk standard approach, add-ons for ABS risks and for gap option risks. All risks, with the exception of the add-ons, are scaled accordingly to obtain a holding period of one year and a confidence level of 99.90%.

The regulatory capital requirement for market risk encompasses the VaR and stressed VaR for, in each case, a 10-day holding period together with the IRC and the market risk standard approach. The CVA risk is also taken into account. When calculating the capital requirement, the individual risk metrics are aggregated by regulatory averages, maximum calculation and scaling.

Quantification and specification

The economic capital for market risk at HVB Group, without taking account of diversification effects between risk types, amounts to €1,999 million. The change compared with the figure as at 31 December 2019 (€1,742 million) is mainly due to the severe market fluctuations in the course of great uncertainty regarding the COVID-19 pandemic.

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 business 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	
	2020	31/12/2020	31/12/2019	2020	31/12/2020	31/12/2019
Credit spread risk	14.5	10.3	5.9	12.5	10.9	8.1
Interest rate positions	6.4	6.0	6.1	7.8	7.8	2.9
Foreign exchange positions	1.4	1.8	1.5	0.1	0.2	0.0
Equity/index positions[1]	4.4	6.2	2.6	—	—	—
HVB Group[2]	**13.7**	**11.1**	**7.9**	**14.1**	**11.9**	**8.3**

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.

Effects of the COVID-19 pandemic can be seen primarily in the increase in credit risk spreads.

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)

	31/12/2020	30/9/2020	30/6/2020	31/3/2020	31/12/2019
Value at risk	92	133	246	129	81
Stressed value at risk	247	251	429	361	293
Incremental risk charge	220	199	139	264	264
Market risk standard approach	60	70	71	68	68
CVA value at risk	34	35	32	19	10
Stressed CVA value at risk	38	39	39	58	68
CVA standard approach	34	34	31	31	29

The increase in the regulatory risk metrics value at risk and stressed value at risk in the first half of 2020 is mainly due to the severe market fluctuations in the course of great uncertainty regarding the COVID-19 pandemic. The decline in the value at risk and stress value at risk in the second half of the year is mainly attributable to changes in positions in the held-for-trading portfolio.

Risk Report (Continued)

Regulatory back-testing of the internal model at HVB for 2020

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. Seven reportable back-testing outliers occurred in 2020. The hypothetical loss was larger than the forecast VaR figure on these days. These seven outliers were all caused by severe market fluctuations in the course of great uncertainty regarding the COVID-19 pandemic.

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 2020, there were eight instances of a limit being exceeded, which were due to severe market fluctuations. On the basis of an approval by the regulatory authorities, the back-testing outliers caused by market fluctuations in the course of the COVID-19 pandemic are not included in the calculation of the capital requirement for market risk.

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.

Stress tests

In addition to calculating the VaR and the other risk metrics, we conduct stress tests on a monthly basis to determine the potential losses in our market risk positions resulting from extreme market movements and extraordinary events. The scenarios we examine range from large movements in interest rates, currency and equity markets through to disruptions in the underlying volatilities. Further scenarios are also considered for HVB Group, such as a widening of credit spreads. We also analyse macroeconomic stress test scenarios based on real market upheavals in the past (historical stress tests) or current threats (hypothetical stress tests).

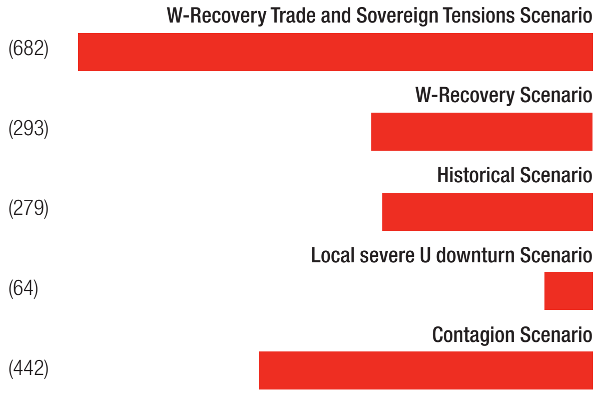
The Historical scenario is calculated to evaluate the effects of a potential financial crisis. This scenario reflects the trend in the financial crisis in 2009. To take account of the low market liquidity, the time horizon for this scenario was extended and covers a period of three months.

Further hypothetical scenarios are based on potential market movements in the future. The Contagion scenario assumes that the debt crisis will worsen in Europe whereas three further hypothetical scenarios "W Recovery", "W Recovery Trade and Sovereign Tensions" and "Local Severe U Downturn" take account of the different effects of the COVID-19 pandemic.

In contrast to previous years, the stress test results also include potential gains and losses on CVA and FundVA income components.

At 31 December 2020, the most significant stress test result of this package of stress test scenarios involves a potential loss of €0.7 billion in the new "W Recovery Trade and Sovereign Tensions" scenario. This scenario is also used in the cross-risk-type stress tests, where it is analysed for risk-taking capacity. On 31 December 2019, the Recession scenario showed the highest stress test loss at €0.6 billion.

HVB Group stress tests at 31 December 2020 (€ millions)



As described under the sub-header "Stress tests" in the section entitled "Implementation of overall bank management", inverse stress tests were again carried out in 2020. Risks resulting from market risk in the banking portfolio were also included in this analysis.

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.

Risk Report (Continued)

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 December 2020, 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.

Information on interest rate risks in the banking book

	REGULATORY PERSPECTIVE		MANAGEMENT PERSPECTIVE	
	31/12/2020	31/12/2019	31/12/2020	31/12/2019
Change in present value +200 basis points in € millions	(353)	(1,713)	(175)	(68)
Interest rate coefficient in %	(1.9)	(11.0)	(1.0)	(0.4)

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 2019 are due to the inclusion of the model components of sight and savings deposits that were not invested on account of the low interest rate environment.

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 plus 100bps or minus 30bps for transactions in euros and other foreign currencies in combination with a minus 100bps interest rate shock for positions in US dollars and British pounds. 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 of minus 30/minus 100bps 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 8.5%.

Effects of changes in the interest rate on net interest

	31/12/2020		31/12/2019	
	€ millions	in %	€ millions	in %
+100 basis points	180	7.3	145	5.7
–30 basis points / –100 basis points	(31)	(1.3)	(50)	(2.0)

The resulting sensitivity analysis was carried out on the basis of the planned net interest for the 2020 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.

3 Liquidity risk

Liquidity risk consists of the following categories:
– short-term liquidity risk
– operational liquidity risk (as part of the short-term liquidity risk)
– funding risk
– market liquidity risk

Categories

Short-term liquidity risk
Short-term liquidity risk relates to the risk of a discrepancy in the amount and/or maturity of incoming and outgoing payments in the short run (one year or less).

Intraday/operational liquidity risk, which is part of the short-term liquidity risk
Operational liquidity risk arises when a financial institution cannot meet its intraday payment obligations (payment obligations within one trading day) from its current incoming and outgoing payments, hence becoming technically insolvent. This can be considered a special type of short-term liquidity risk. An intraday cushion is set up as part of the short-term liquidity cushion with a view to balancing the intraday liquidity requirement and covering unforeseen payment obligations.

Funding risk
The funding risk (structural liquidity risk) is defined as the risk of not being able to raise the necessary refinancing funds at an appropriate ratio between medium- to long-term assets and liabilities (over one year), at acceptable prices and in a stable and sustainable manner without adversely affecting the Bank's day-to-day operations or financial position. It could potentially have an impact on the funding costs (own credit and market funding spread) and thus on the future earnings of the company.

Market liquidity risk
Information on the market liquidity risk is provided in the section entitled "Market risk".

Risk Report (Continued)

Strategy
Liquidity management at HVB Group is divided into short-term liquidity management (one year or less) and long-term liquidity management (more than one year). Risk drivers that may be the cause of potential liquidity outflows have been identified for the various segments.

Furthermore, various dimensions of liquidity risk management have been defined to which appropriate instruments and controlling mechanisms have been assigned depending on the type of risk involved.

The risk appetite is defined with regard to liquidity risk on the basis of the business activities and taking into account risk sources and risk drivers. This forms the foundation for the management and limit mechanisms, such as liquidity reports, projections and plans, and the definition of liquidity cushions to be maintained for unexpected outflows of liquidity during the day. The result is the specification of limits, triggers and a minimum survival period that matches the risk appetite.

Limit system
For the management of short-term liquidity risk, we have put in place a cash-flow-oriented limit system that presents the relevant balances within HVB Group per working day and limits the positions appropriately.

The difference between the calculated potential liquidity requirement and the existing liquidity reserves is limited.

A limit was set for operational liquidity risk as part of short-term liquidity risk by implementing a minimum balance to be observed during the day, by means of which additional liquidity is maintained to cover unforeseeable outflows (intraday liquidity cushion).

Funding risk or structural liquidity risk is restricted by defining a limit for the ratio of liabilities to assets.

The effects arising from the change in funding spreads are to a very large extent taken into account by limiting funding risk. In addition, the internal transfer prices for the lending and deposit-taking activities are continually reviewed for appropriateness and regularly adjusted to reflect the market situation.

Reduction
Among other ways of reducing liquidity risk, we specify processes, implement an early warning system complete with early warning indicators and a limit system, and manage the highly liquid assets made available as collateral.

Measurement
Short-term liquidity risk
To measure short-term liquidity risk, cash flow profiles are produced on a daily basis. The resulting balances are compared with the available liquidity reserves, which consist primarily of the available highly liquid securities eligible at all times as collateral for central bank borrowings. The cumulative balance of the above-named components is backed with limits for all maturity buckets of up to three months for the relevant units of HVB Group.

The aggregate amount for the three-month maturity bucket is published in the Risk Report for short-term liquidity risk as the relevant figure for managing the Bank's liquidity risk.

Furthermore, stress-test scenarios based on the liquidity profiles of the HVB Group units are simulated at regular intervals and the impact on liquidity is calculated. The corresponding stress-test scenarios take account of both company-specific influences (e.g. potential HVB Group-specific incidents) and external factors (e.g. disruptions in global financial markets), as well as a combination of company-specific and external factors (e.g. the scenario demanded under the MaRisk rules). A time horizon of up to two months is defined for the individual stress-test scenarios, during which the available liquidity reserves are expected to exceed the simulated outflows of liquidity. This ensures that countermeasures can be initiated promptly, if required. In addition, the defined early warning indicators and relevant concentration risks are determined and monitored at regular intervals.

Calculating the liquidity coverage ratio (LCR) is intended to ensure that an institution is able to meet its short-term payment obligations under the assumption of an acute stress test scenario over a period of 30 calendar days.

Funding risk

To measure funding risk, the long-term funding requirements based on the expected business development are determined and updated in a coordinated process. The long-term funding requirements, which are used to set the funding targets and are presented to the Asset Liability Committee (ALCO), take into account the assets and liabilities falling due in the planning period. The key assumptions underlying the risk measurement methods are reviewed on a regular basis to assess their appropriateness. The net stable funding ratio (NSFR) is used as the key internal indicator for measuring funding risk according to CRR II requirements. An internal indicator "adjusted NSFR" is calculated for the time horizon greater than three years, in which connection the net surplus of current liabilities to assets is assumed to be stable. In addition, both the loan-to-deposit ratio and the funding gap are recorded.

Monitoring and controlling

Short-term liquidity risk

The task of monitoring the short-term liquidity situation at HVB Group has been entrusted to the Finance unit in the CFO organisation. This essentially involves analysing and controlling the short-term liquidity profiles within the scope of the limits defined and monitored by the CRO organisation on a daily basis. The monitoring and controlling of intraday liquidity risk are essentially performed on the basis of various minimum balances that must be observed during the day and at the beginning of the day. These are set against the current volumes in the relevant accounts on a regular basis and monitored. Responsibility for monitoring and controlling developments on the respective local markets rests with the local Treasury units, which report to the Finance unit as and when necessary.

For short-term liquidity risk, moreover, weekly stress analyses based on various scenarios allow us to make projections on the impact of sudden disruptions on the liquidity position, enabling us to take the necessary management measures as early as possible. Units in the CRO organisation are responsible for monitoring and analysing the stress-test scenarios, the early warning indicators and concentration risk, while the CFO organisation has been tasked with monitoring and analysing the portfolio of freely disposable securities eligible as collateral for central bank borrowings that can be used at short notice to cover unexpected liquidity outflows as well as concentration risk. Additional market liquidity analyses are carried out by the CRO organisation during the stress tests.

Funding risk

The task of monitoring the structural liquidity situation at HVB Group has similarly been entrusted to the Finance unit in the CFO organisation. This essentially involves analysing and controlling the long-term mismatches in the maturities of assets and liabilities within the scope of the defined limits and also specified funding targets. Compliance with the long-term funding ratios is monitored on a monthly basis. The funding risk of HVB Group is broken down by product, market and investor group. The front-office units implement the volume and product parameters derived from the funding targets cost-efficiently upon consultation with the Finance unit. This activity is similarly supported by a liquidity cost allocation mechanism – known as Funds Transfer Pricing (FTP) – for all significant business activities, the principles of which are defined in the FTP policy.

The ALCO and the Management Board are regularly informed about the current liquidity and funding situation. A contingency plan is in place to allow the impact of potential liquidity crises to be managed. This plan describes and regulates the distribution of responsibilities, internal reporting requirements, decision-making powers and potential measures.

The rules and regulations governing liquidity management are defined in a liquidity policy adopted by the Management Board of HVB. The key points contained in the policy relate to the ability to satisfy financial obligations at all times in line with the defined risk appetite. Its objectives include the following: optimising the projected cash flows, restricting the cumulative short-term liquidity differences, performing stress tests at regular intervals and restricting the long-term maturity mismatches between the liabilities side and the assets side.

The liquidity policy and contingency plan together with supplementary remarks are updated at regular intervals by the CRO organisation with support from the CFO organisation. The liquidity policy is implemented by the operational business units and coordinated and monitored for the relevant units of HVB Group by the Market Risk unit in the CRO organisation.

Risk Report (Continued)

Quantification and specification

Short-term liquidity risk

Within the framework of our limit system, we showed an overall positive balance of short-term liquidity risk of €56.6 billion at HVB Group for the three-month maturity bucket at the end of December 2020 (31 December 2019: €43.8 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 €13.5 billion at the end of 2020 (31 December 2019: €21.9 billion).

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 31 December 2020 with a value of more than 100%.

Funding risk

The funding risk of HVB Group was again low in 2020 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 December 2020, HVB Group had obtained longer-term funding with a volume of €38.3 billion (31 December 2019: €10.5 billion), €25.7 billion of which was concluded via the Targeted Longer-Term Refinancing Operation of the ECB (TLTRO III). This was offset by the maturity of €7.0 billion (June 2020) and the premature repayment of €5.6 billion (maturity: March 2021) of the TLTRO II. 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 2020 based on CRR II requirements. The internal indicator "adjusted NSFR greater than three years" was over 100% in 2020. On account of their ratings, our Pfandbriefe still remain an important funding instrument.

(in %)

BREAKDOWN OF SOURCES OF FUNDING OF HVB GROUP	
Deposits from customers	46.4
Deposits from banks	10.0
Debt securities (including Pfandbriefe)	10.9
Repos[1]	9.5
Equity	6.2
Central banks	9.8
Financial liabilities held for trading[2]	2.3
Other	2.9
Financial assets at fair value through profit or loss	2.0

1 Repos from the items "Financial liabilities held for trading", "Deposits from customers" and "Deposits from banks".
2 Without the item "Negative fair values arising from derivative financial instruments".

Stress tests

Stress analyses are carried out at regular intervals, enabling us to make projections on the impact of sudden disruptions to our liquidity position on the basis of various scenarios so that we can initiate appropriate management measures as early as possible.

We include Bank-specific, market-wide and combined scenarios when conducting our stress tests. The calculations at the end of the year 2020 showed that the available liquidity reserves were sufficient to cover the funding requirements over the minimum period demanded.

4 Operational risk

Strategy

The risk strategy pursues the goal of reducing operational risk to a reasonable level from a profitability perspective and taking the defined risk appetite into account. This is primarily intended to reduce or avoid significant losses by taking appropriate measures and also helps to generate a sustainable improvement in earnings.

To make the risk strategy more specific, Bank-wide and business segment-specific action areas are defined on the basis of influencing factors relevant to operational risk.

Limit system

Operational risk is part of the internal capital, with a limit set for HVB Group accordingly.

Reduction

HVB Group has a group-wide organisational structure for operational risk management. The individual business segments of HVB and each subsidiary of HVB Group are responsible for identifying, analysing and managing operational risk.

Loss events that have occurred and significant risks are reported to the Management Board and the Risk Committee at regular intervals. On a local level, operational risk managers report losses and relevant risks to their senior management on a quarterly or half-yearly basis.

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 in 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.

Risk Report (Continued)

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.

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 with the U.S. and New York Authorities, HVB has implemented additional requirements and controls, about which the bank makes periodic reports to the authorities.

Lehman Brothers Special Financing Claim

The Lehman Brothers Special Financing Claim (LBSF) relates to HVB's holding of: (A) 2005-1 € 19,000,000 Class A2-A9 notes issued by Ruby Finance Plc (Ruby), and (B) 2004-1 Upper Thames € 25,000,000 Credit-Linked Synthetic Portfolio Notes due in 2043 and issued by Quartz Finance PLC (Quartz).

Both Ruby and Quartz entered into contracts for derivatives with Lehman Brothers Special Financing, Inc. LBSF included these credit derivative transactions in omnibus avoidance proceedings commenced before the U.S. Bankruptcy Court on 1 October 2010 (LBSF v Bank of America, N.A. et. al. Adv. Pro. No. 10-03547; the "Adversary Proceeding"). On 18 July 2012, LBSF amended its First Amended Claim in the Adversary Proceeding, in order to, among other things, add the London Branch of HVB as a "Noteholder Defendant", in an attempt to claw-back distributions for the benefit of LBSF (as derivative counterparty) already made by both Ruby and Quartz to HVB (as noteholder).

The U.S. Bankruptcy Court held a hearing on 4 May 2016 on an omnibus motion to dismiss filed by the Noteholder Defendants, and the decision of Bankruptcy Judge Chapman on the omnibus motion was issued on 28 June 2016. In her decision, Judge Chapman dismissed the case against HVB and the other Noteholder Defendants.

LBSF unsuccessfully appealed against such decision to the U.S. District Court for the Southern District of New York.

Risk Report (Continued)

On 13 April 2018, LBSF filed notice of appeal to the Second Circuit Court of Appeals. The appeal hearing was held on 26 June 2019 and decided on 11 August 2020. In its decision the Second Circuit Court of Appeals affirmed the decision of the District Court, which was a complete dismissal of LBSF's claims. LBSF was entitled to file a motion for a re-hearing en banc before the entire Second Circuit Court of Appeals within 14 days of the judgment date but such deadline has now passed. Additionally, within 150 days after the entry of the judgment (i. e. no later than 8 January 2021), Lehman was entitled to file a petition for certiorari with the Supreme Court of the United States but this deadline has now passed. LBSF has no further rights of appeal.

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 extends to certain periods from 2007 to 2012, and includes alleged activities by HVB in a part of this period. The Statement of Objections does not prejudge the outcome of the proceeding; should the Commission conclude that there is sufficient evidence of an infringement, a decision prohibiting the conduct and imposing a fine could be adopted, with any fine subject to a statutory maximum of 10% of company's annual worldwide turnover.

HVB had access to the entirety of the European Commission's file on the investigation from 15 February 2019 onwards. As a result of the assessment of the files, the Bank regards it no longer remote but possible, even though not likely, that a cash outflow might be required to fulfil a potential fine arising from the outcome of the investigation. On the basis of the current information, it is not possible to reliably estimate the amount of any potential fine at the present date.

UniCredit S.p.A. and HVB have responded to the raised objections on 29 April 2019 and participated in a hearing before the European Commission on 22-24 October 2019. Proceedings are ongoing. There is no legal deadline for the Commission to complete antitrust inquiries.

On 11 June 2019, HVB and UniCredit Capital Markets LLC were named, among other financial institutions, as defendants in a putative class action already pending in the United States District Court for the Southern District of New York. The third amended class action complaint, filed on 3 December 2019, alleges a conspiracy among dealers of Euro-denominated bonds issued by European central banks to fix and manipulate the prices of those bonds, among other things by widening the bid-ask spreads they quoted to customers. The putative class consists of those who purchased or sold Euro-denominated bonds issued by European central banks in the US between 2007 and 2012. On 23 July 2020, the court granted motions to dismiss the third amended complaint by certain defendants, including HVB and UniCredit Capital Markets LLC, without prejudice. Plaintiffs filed their fourth amended class action complaint on 9 February 2021, repleading their claim against HVB and UniCredit Capital Markets LLC and other financial institutions. Like earlier pleadings, the fourth amended class action complaint does not include a quantification of damages claimed. Exchange of correspondence concerning motions to dismiss the fourth amended complaint is scheduled to commence in March 2021.

Measurement

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.

Stress tests

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

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 Tucherpark site constitutes the largest disposal from the portfolio and was realised at the beginning of 2020. Investing in an alternative location for the 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.

Risk Report (Continued)

Facility concepts are drawn up for both the Bank-owned portfolio and the rented properties, under which the requirements of the business 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. The scale of the impact of the COVID-19 pandemic is currently being intensively monitored and also discussed with external experts. No clear picture is emerging as yet. This means that the effect on the real estate risk of HVB Group cannot be foreseen at the present time.

Real estate risk is managed overall on the basis of an internal capital limit for HVB Group. In addition, economic capital limits adjusted for diversification effects were allocated to the business segments and the relevant subsidiaries for 2020 in the context of overall bank management. Based on these limits, HVB Group defined additional early warning indicators in the form of targets and triggers in order to identify in advance any overshooting.

To quantify real estate risk, the Bank uses an empirical Bayesian model (a group-wide real estate risk model) with a confidence level of 99.90%. This model applies an expected-shortfall approach which also takes account of the possible risk of extreme values (tail risk) (i.e. losses in excess of the VaR).

The economic capital for real estate risk is measured by the Credit Risk Modelling & Systems (CRS) unit and calculated by the Chief Data Office (CDO). The Strategic Credit & Integrated Risks (SCI) unit is responsible for reporting to the business segments, the CRO, the Management Board and the Risk Committee of the Supervisory Board. In line with the risk strategy, quarterly risk reporting also includes a comparison of the actual values with the limits.

The economic capital for real estate risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk cushion, amounts to €345 million at 31 December 2020, which represents a decrease of €81 million (31 December 2019: €426 million). The fully diversified economic capital for real estate risk at HVB Group stands at €181 million (31 December 2019: €322 million). The change in economic capital is mainly attributable to the sale of the Tucherpark site.

The risk figures relate to a portfolio valued at €2,960 million.

Breakdown of the real estate portfolio by type

	PORTFOLIO VALUE € millions		SHARE in %	
	2020	2019	2020	2019
Real estate used by the Bank	2,262	2,207	76.4	56.7
Real estate not used by the Bank	698	1,687	23.6	43.3
HVB Group	**2,960**	**3,894**	**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.

Business risk is managed overall on the basis of an internal capital limit for HVB Group. Based on this limit, HVB Group has additionally defined early warning indicators in the form of targets and triggers in order to identify in advance any overshooting.

HVB Group uses a group-wide model to measure the economic capital used by business risks that is based on a time series model of the quarterly income. The economic capital requirement corresponds to the unexpected loss and is quantified using value-at-risk (VaR) metrics over a period of one year and a confidence level of 99.90%.

The economic capital for the business risk is measured by the Credit Risk Modelling & Systems (CRS) unit and calculated by the Chief Data Office (CDO). The Strategic Credit & Integrated Risks (SCI) unit is responsible for reporting to the business segments, the CRO, the Management Board and the Risk Committee of the Supervisory Board. In line with the risk strategy, quarterly risk reporting also includes a comparison of the actual values with the limits.

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 €346 million at 31 December 2020 (31 December 2019: €526 million). The fully diversified economic capital for HVB Group's business risk totals €239 million as at 31 December 2020 (31 December 2019: €354 million).

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

Risk Report (Continued)

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 €915 million was determined as at 31 December 2020 for the total pension risk of HVB Group (31 December 2019: €615 million). The increase compared with year-end 2019 is primarily due to the introduction of a group-wide model which assumes a significantly higher potential interest rate shock on benefit obligations. Upon application of the new model at 31 December 2019, the back-calculated pension risk would have amounted to €867 million. 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 a business segment or competence line, or deemed non-strategic and connected with the fundamental goal of reduction.

Financial investment risk is controlled at a higher level on the basis of a limit for internal capital for HVB Group. In addition, the business segments and the relevant subsidiaries have been allocated limits for economic capital for the year 2020 that were adjusted for diversification effects for the purpose of overall bank management. On the basis of these limits, HVB Group has additionally defined early warning indicators in the form of target values and triggers in order to indicate in advance any overshooting. As holdings from unlisted companies were subsumed under credit risk in September 2020, a limit has no longer been directly allocated to this part of the financial investment risk from 2021.

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

The economic capital for financial investment risk is measured by the Credit Risk Modelling & Systems (CRS) unit and calculated by the Chief Data Office (CDO). The Strategic Credit & Integrated Risks (SCI) is responsible for reporting to the business segments, the CRO, the Management Board and the Risk Committee of the Supervisory Board. In line with the risk strategy, quarterly risk reporting until June 2020 also included a comparison of the actual values with the limits.

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

Breakdown of the financial investment portfolio

	PORTFOLIO VALUE € millions		SHARE in %	
	2020	2019	2020	2019
Private equity investments	10	10	4.1	4.5
Other investments[1]	225	212	95.9	95.5
HVB Group	**235**	**222**	**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

As a universal bank, HVB Group focuses on the one hand on the regional development of the German market, on the other hand, it is the centre of competence for the investment banking of the whole of UniCredit. Therefore, HVB Group's profitability and risk profile are influenced in particular by the economic development in Germany and the development of international financial and capital markets. In this context, 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.

The following areas are currently classified as relevant for the occurrence of strategic risk:
– Economic environment – If, among other things, the stabilising measures taken by the German government and central banks in the eurozone, particularly in the course of the COVID-19 pandemic, do not take effect and economic growth slows in Europe on a sustained basis, this could have negative effects on the operating result of HVB Group.
– Strategic orientation of the business model of HVB Group – The persistently low level of interest rates could, for example, lead to imbalances in the earnings contributions of the business segments.
– Bank-specific risks – The intensification of competition in the financial sector could, for example, lead to further shifts in market shares.
– Regulatory and legal framework – Should HVB or one of its subsidiaries not fully comply with the regulatory requirements of the supervisory authorities, this could lead to sanctions by the competent supervisory authority.
– Rating of UniCredit Bank AG – A rating change downwards (downgrade) could make refinancing costs more expensive or have a negative impact on business opportunities as a counterparty in the interbank market or with rating-sensitive customers.

Risk Report (Continued)

The strategic risk is not quantified as part of internal capital but is assessed qualitatively instead. This assessment is based on a traffic light system: low risk (green), increased risk (yellow) and high risk (red). Furthermore, the national and international environment in which HVB Group operates is continually monitored (for example, political, economic, regulatory or specific banking market conditions) and the Bank's own strategic positioning is continually reviewed.

Strategic risk is monitored by the Management Board and its staff offices and, if necessary, analysed in depth on an ad hoc basis. Any changes in the strategic parameters are discussed at Management Board meetings, whereby alternative courses of action are derived and implemented as required. A dialogue with external experts (such as management consultants and independent auditors) regarding strategic issues and options at Management Board level and below ensures the involvement of external experts' know-how.

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 (RRC) will obtain a decision on the basis of the risk analysis and the qualitative assessment.

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 unit (CRO organisation). The Operational & Reputational Risks unit consolidates the results of the senior management interviews and prepares a yearly RepRisk Report covering the largest reputational risks at HVB.

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

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

The economic capital for reputational risk is calculated on a quarterly basis at UniCredit 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 department 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 manager and the heads of the RTOs to prepare and/or update the related risk analyses.

In 2020, a new critical/material outsourcing arrangement was agreed in HVB Group by HVB. The payment service provider Betriebscenter für Banken AG, which was also previously classified as critical/material at HVB, was replaced on 1 November 2020 by the provider equensWorldLine SE Germany, which is also classified as critical/material. This did not result in a significant change in the risk.

ICS – Internal Control System

Internal control system with regard to the financial reporting process

Section 315 (4) of the German Commercial Code (Handelsgesetzbuch – HGB) requires capital-market-oriented companies as defined in Section 264d HGB to describe the main features of the internal control system (ICS) and risk management system with regard to the financial reporting process.

As part of UniCredit, HVB Group is obliged to comply with Law 262 ("the Savings Law" – Law 262/2005, passed in Italy in 2005 and amended by Legislative Decree 303/2006, based on the Sarbanes-Oxley Act in the United States, Law 262). Alongside the internal CFO controls, there are also checking and control steps in the upstream processes and organisations.

Definitions and objectives

The risk management system is formulated in broad terms and relates above all to strategic management, the identification, quantification, assessment, monitoring and active management of risk. The ensuing coordination of risk-management, risk-controlling and risk-monitoring processes in HVB Group is presented in the Risk Report in the present Management's Discussion and Analysis. The respective risk types are described in detail in the sections entitled "Risk types" and "Risk types in detail".

The ICS encompasses the policies, processes and measures needed to ensure the financial reporting process and compliance with the applicable legal provisions. It is intended to ensure that internal and external financial reports are correct and reliable and that the assets, provisions, liabilities, and deferrals and accruals are classified, recognised and measured and changes in equity are correctly shown.

Risks with regard to the financial reporting process might, for example, involve human processing errors, system weaknesses or fraudulent conduct resulting in significant financial misrepresentations or delays in financial reporting, and these might not give a true and fair view of the assets, liabilities, financial position and profit or loss. These risks might possibly entail legal penalties and, in addition, the erosion of stakeholders' confidence and thus damage to the Bank's reputation. The purpose of the internal control system with regard to the financial reporting process is to implement controls that ensure with an adequate degree of certainty that the annual and consolidated financial statements together with the Management Report and Management's Discussion and Analysis are prepared in compliance with regulations despite the identified risks.

The method of the ICS in relation to the financial reporting process and thus the introduction of processes including risk and monitoring assessment is based on the international "Internal Control – Integrated Framework" issued by the Treadway Commission's Committee of Sponsoring Organizations (COSO). The main task in this context is to define specific objectives to facilitate a control system and to monitor the effectiveness of the control system on this basis. The following objectives are pursued:

- Completeness: Mapping of all relevant transactions such as assets, liabilities and provisions that have an effect on the financial reports.
- Measurement: Recognition of the relevant items at their correct amounts in the financial reports.
- Presentation and disclosure: The financial reports are correctly classified and discussed regarding recognition, structure and disclosures in the notes to the financial statements, comply with legal requirements and are published on schedule.

Even the extensive structuring of the ICS can naturally only ensure that the objectives of the ICS are achieved with reasonable assurance but not with absolute certainty. The documented controls carried out within the framework of the ICS for the relevant processes or systems are therefore unable to completely eliminate mistakes or fraudulent actions. It must also be taken into account in this context that the work performed and spending on the ICS must be commensurate with the benefits achieved.

ICS organisation

The Management Board determines the extent and orientation of the ICS specifically geared to HVB Group, taking measures to refine the systems and adapt them to changing conditions. At Board meetings, it regularly discusses the consolidation and monitoring of all projects and measures related to the ICS under the key topic of the Internal Control Business Committee (ICBC).

Responsibility for the financial reporting process and, in particular, for the preparation of the annual and consolidated financial statements rests with the Chief Financial Officer (CFO). The CFO receives significant support in this context from the Chief Risk Officer (CRO) by the CRO also assuming responsibility for the measurement of financial instruments (receivables, securities and derivatives), among other things.

The CFO organisation is also supported in the technical process of preparing the financial statements by the Human Resources department (recognition and measurement of payroll expenses), the Legal department (recognition and measurement of legal disputes and other legal risks) and external third parties. The latter essentially extend to various expert opinions of external service providers relating to such things as the measurement and accounting treatment of pension provisions.

Technical system support for the application systems used in the Accounting department and especially in connection with preparing the financial statements has been outsourced to UniCredit Services S.C.p.A., the UniCredit subsidiary responsible for IT. UniCredit Services S.C.p.A. is monitored and managed by the Retained Organisation of the Chief Operating Officer (COO).

Organisational structure and tasks of the CFO organisation

For purposes of the financial reporting processes, the CFO organisation is essentially broken down into the following areas:

HVB's financial reporting is conducted by the Accounting, Shareholdings, Regulatory Reporting (CFF) unit. This unit has functional responsibility for the financial reporting systems employed by HVB. At the same time, the CFF unit is responsible for fundamental accounting questions under IFRS and the German Commercial Code, it prepares the consolidated financial statements and also is responsible for the financial reporting in the Annual Report of HVB Group. The management and administration of shareholdings for financial reporting purposes and the regulatory reporting for HVB Group to the banking supervisory authorities are positioned in this unit.

The central tax department (CFT/Tax Affairs) should monitor compliance with all tax laws on the one hand and on the other hand, it advises its customers (Management Board, business lines and competence lines) on the tax-related concerns of HVB, including its foreign branches.

Regional Planning & Controlling (CCP) is tasked with central business management and cost controlling at HVB Group. Furthermore, CCP prepares and validates the internal segment report in accordance with IFRS. This department also has process responsibility for the preparation of income budgets and income projections. Moreover, the business segment-related controlling departments for all the segments excluding Corporate & Investment Banking (CIB) and the Group Corporate Centre (GCC) are assigned to CCP. Controlling for CIB is the responsibility of CPA. This department also carries out the reconciliation of trading income for Markets jointly with Accounting. The reconciliation of trading income for Treasury is carried out between Accounting and Finance (CDF).

The Chief Data Office (CDO) is responsible for data and information governance in coordination with the Group Data Office. In addition, significant parts of the data production for the CFO organisation are amalgamated in CDO in order to achieve a continual improvement in data quality. This department also has responsibility for the implementation of various IT projects relating to financial reporting.

ICS – Internal Control System (Continued)

Controls in the ICS for risk minimisation

Based on the requirements under Law 262 and the legal requirements under the German Commercial Code, a number of financial reporting processes complete with the risks and controls included therein are documented in the course of implementing the ICS at HVB. To reduce the risk of misrepresentation in financial reporting, various preventive and investigative controls are carried out which are documented in process descriptions. Attention is paid to compliance with the separation of functions and with approval authority regulations in the definition of controls. The controls comprise both manually operated system-based controls and purely manual controls. Alongside the internal CFO controls, there are also checking and control steps in the upstream processes and organisations.

The focus of risk and monitoring analysis is on identifying and evaluating the risks and controls relevant to financial reporting. Identified risk potential is to be sufficiently mitigated through defined control steps. In periodic representative spot checks, those responsible for the controls document the implementation of these controls and provide adequate records. If no controls are implemented or if controls are identified that do not sufficiently reduce risk, or there is insufficient documentation of the controls, measures are initiated to eliminate the identified deficiencies. The timely implementation and documentation of these measures are reviewed on a quarterly basis.

In a half-yearly certification process, the management of the departments in charge of processes confirms to the CFO of HVB Group and the CFO to UniCredit S.p.A., that controls to ensure correct reporting have been carried out.

Furthermore, a yearly analysis is carried out on the basis of what are known as "company level controls". This is a list of questions based on the international COSO framework, the answers to which are used to check the existence of comprehensive control measures in HVB Group that are suitable for reducing the risk of incorrect external presentation or incorrect actions, not only with regard to financial reporting.

The controls cover the aspects of the ICS described below:

Group posting and accounting rules defined in the UniCredit Group Accounting Manual (GAM), which is valid for the Group as a whole, serve to ensure consistent financial reporting about the Group's business activities. In addition, there are general accounting rules set out in the Bank-wide Operating Guidelines, the application of which is mandatory for all process participants.

HVB uses SAP's standard SAP Balance Analyzer and Business Warehouse software to prepare its annual financial statements. The SAP Balance Analyzer concept is based on the mainly automated uploading of individual transaction data from the upstream systems relevant to financial reporting (sub-ledger). The Accounting department collates the data relevant to the financial statements. It reconciles the positions delivered by the upstream systems and automatically checks the totals against the general ledger account balances, which serves as proof of the completeness of balance sheet items. At the same time, it also corrects errors and performs manual bookings of one-off transactions and closing entries. Adjustments and closing entries are carried out by authorised persons in accordance with the principle of dual control. Furthermore, deviation analyses are conducted at item level to minimise the risk of error and incomplete data.

The ICS for securities, derivatives and other trading-related transactions also comprises the following components:

- The allocation of transactions to the holding categories compliant with IFRS and HGB is primarily governed by the orientation of the operating units. The determination of the holding category is determined individually for each trading book and the related trading strategy. The Accounting department is incorporated as an authorising body to ensure compliance with individual requirements relating to classification based on the respective accounting standard.
- Booking standards based on the respective holding category – initiated by transactions – are defined in the accounting systems.
- The income calculated for purposes of financial reporting is checked on a monthly basis by comparing it with the result of the economic income statement that serves as the basis for the daily information provided to the Management Board members. Following this, the results are analysed and comments made on the content of the deviation analysis.
- The Risk Control department, which reports to the CRO, performs several tasks in connection with ensuring the valuation and other information relevant for the financial statements (for example: level allocation) of the financial instruments mentioned above. Firstly, transactions are checked by the Risk Control department to ensure compliance with market pricing. Secondly, the Risk Control department reviews the valuation of financial instruments in the front office systems. Depending on the market parameters and asset classes, market data are supplied by both the trading departments and external sources such as Bloomberg, Reuters and MarktIT. Valuation adjustments and valuations based on estimates are to be agreed by the CRO and CFO organisations.
- In accordance with the separation of functions, the back office handles the processing of HVB trades. For derivatives, this is UniCredit Services S.C.p.A., which is supervised by the COO unit. Furthermore, external service providers have been engaged to process securities transactions in Germany and for the Milan branch. It has thus been ensured that trades are processed independently of the Trading department.

A cross-departmental new product process is in place for developing and launching new products, as stipulated in the Operating Guidelines. The products relevant for a new product process are addressed in this process. It involves all the departments concerned as they have veto rights and are authorised to enforce amendments up to and including the termination of the new product process.

The consolidated financial statements prepared in accordance with IFRS are based on the standalone financial statements of HVB, the subsidiaries included in the consolidated financial statements and special purpose entities on the basis of local accounting rules. These financial statements are converted by the reporting companies to HVB Group standards in accordance with the group-wide UniCredit Accounting Principles and transformed to comply with the corporate position classifications. The financial information reported within the framework of the consolidated financial statements is included in the process of auditing the consolidated financial statements. The figures for the consolidated financial statements and the subsequent consolidated bookings are collected and reported using the TAGETIK CPM consolidation system marketed by Tagetik Software S.R.L. This is used across the entire corporate group and networked across all Group companies. After the figures have been entered in or transferred to this system by the Group companies, the system is closed for further entries in line with the phases of the consolidation process. These data may only be changed in exceptional circumstances, as agreed with the subsidiary concerned. The consolidation process includes system-based validation checks at a diverse range of levels to reduce the risk of error. In addition, plausibility checks are carried out on a regular basis.

ICS – Internal Control System (Continued)

The figures presented in the consolidated balance sheet and consolidated income statement are validated using deviation analysis at historical comparative figures and budget figures and on the basis of non-recurring effects in an ongoing process that is carried out over the entire course of the reporting year as part of the process of preparing the monthly and quarterly financial statements. In addition, the data are also verified by analysing the segment report.

With regard to the presentation and disclosure of financial reporting-related data in financial reports, controls have been implemented to ensure compliance with disclosure duties. This is carried out through the use of checklists and through the review and approval of the data by management personnel within the CFO organisation.

UniCredit Services S.C.p.A. carries out the back-up and archiving of data from financial reporting-related application systems under the responsibility of the CFO in accordance with Section 257 HGB in conjunction with Sections 238 and 239 HGB and in accordance with German Generally Accepted Accounting Principles (GAAP) under the supervision of the Retained Organisation and the respective banking expert responsible. In the course of what are referred to as first level controls, controls between the upstream systems (e. g. EuroSIG) and the general ledger have been outsourced to UniCredit Services S.C.p.A. via additional service level agreements (SLAs). Another technical review takes place in the Accounting department as a second level control.

The required protection against unauthorised access, and compliance with the principles of functional separation when using the Bank’s financial reporting application systems are to be ensured in particular by requesting and periodically monitoring individual rights in the authorisation management systems. For SAP rights, special approval is provided across the board by the functional units responsible for the application. The use of individual rights implies a time restriction of no more than one year.

Furthermore, contingency plans are in place to ensure the availability of human and technical resources to handle processes regarding financial reporting. These contingency plans are updated and refined regularly and on an ad hoc basis.

Monitoring the effectiveness of the ICS

Internal Audit

The Internal Audit department is a process-neutral instrument of the Management Board, to which it reports directly. According to its internal regulations, the Management Board bears the overall responsibility for setting up the Internal Audit department and ensuring that it functions properly. In the reporting year, operational responsibility for the audit function was assigned to the Spokesman of the Management Board (CEO).

The Internal Audit department is responsible for the risk-oriented, process-neutral auditing and assessment of all activities and processes, regardless of whether they are outsourced or not. The outsourced activities may be audited by the internal audit function of the service provider.

For this purpose, Internal Audit carries out a risk-based selection of individual operating and business processes in order to set scheduling priorities for audits. The Minimum Requirements for Risk Management (MaRisk) stipulate that all operating and business processes must be audited at least every three years. In the case of activities and processes deemed to be of lower priority in terms of risk, it is permissible to deviate from the three-year cycle. Operating and business processes subject to especially high levels of risk are audited at least once a year. If the need arises or it is instructed to do so, the Internal Audit department may also carry out tasks in subsidiaries.

The Bank's Internal Audit department must audit and assess the following areas in particular:

- functionality, effectiveness, economic efficiency and appropriateness of the internal control system
- applications, functionality, effectiveness and appropriateness of the risk management and risk control systems, reporting, information systems, and finance and accounting
- compliance with legal and regulatory standards as well as other regulations
- observation of internal operational guidelines, ordinances and regulations
- correctness of operational and business processes
- regulations and measures to protect assets

While audit reports are submitted to audited units and the responsible Management Board members, the Management Board as a whole receives quarterly reports and an annual report which include an overview of audit findings as well as significant deficiencies, major deficiencies, severe deficiencies and particularly severe deficiencies as defined in the MaRisk rules, the measures taken and their current status.

The management of the Internal Audit department informs the Audit Committee and the Risk Committee of the Supervisory Board on a quarterly basis at the meetings of these committees on the main findings of the audits carried out by Internal Audit.

Supervisory Board

It is the task of the Supervisory Board to advise the Management Board on the running of the Bank and monitor it as it conducts its business. Particularly with respect to the monitoring of the financial reporting process and the effectiveness of the ICS, the Supervisory Board receives support from the Audit Committee pursuant to Section 107 (3) AktG and Section 25d (9) Nos. 1 and 2 KWG. In this context, the Audit Committee also addresses the ICS in connection with the financial reporting process. Furthermore, the Supervisory Board – and, in a preparatory role, the Audit Committee – is itself integrated into the financial reporting processes through its monitoring of the financial reporting by reviewing and approving the annual and consolidated financial statements, the Management Report and the Management's Discussion and Analysis as well as the proposal for the appropriation of profit. In addition, the Audit Committee and the Supervisory Board discuss the interim financial information with the Management Board as such information becomes available throughout the year.

Refinement of the ICS

When changes are made to the legal provisions and regulations for financial reporting, they must be assessed to determine what consequences, if any, they have for the financial reporting processes. In the case of amendments or new regulations that would have an impact on the accounting processes, a corresponding project is set up to cover measures such as IT adaptations, working procedures and posting instructions and the effects on financial reporting across all departments and business segments.

In the course of the update of the ICS in relation to the accounting process, the documented processes are subject to half-yearly reviews and adjustments for organisational changes and changes in content by the persons responsible for the process and controls.

Financial Statements (2)

Consolidated Financial Statements

Consolidated Income Statement

Consolidated Income Statement

INCOME/EXPENSE	NOTES	2020 € millions	2019 € millions	CHANGE € millions	in %
Interest income[1]		3,423	3,845	(422)	(11.0)
Negative interest on financial assets		(211)	(131)	(80)	+ 61.1
Interest expense		(1,207)	(1,573)	+ 366	(23.3)
Negative interest on financial liabilities		408	247	+ 161	+ 65.2
Net interest	34	2,413	2,388	+ 25	+ 1.0
Dividends and other income from equity investments	35	37	24	+ 13	+ 54.2
Net fees and commissions	36	1,007	973	+ 34	+ 3.5
Net trading income	37	662	579	+ 83	+ 14.3
Net gains/(losses) on financial assets and liabilities at fair value	38	(78)	108	(186)	
Net gains/(losses) on derecognition of financial instruments measured at cost	39	(3)	13	(16)	
Net other expenses/income	40	603	742	(139)	(18.7)
Payroll costs		(1,451)	(1,453)	+ 2	(0.1)
Other administrative expenses		(1,231)	(1,220)	(11)	+ 0.9
Amortisation, depreciation and impairment losses on intangible and tangible assets		(126)	(483)	+ 357	(73.9)
Operating costs	41	(2,808)	(3,156)	+ 348	(11.0)
Credit impairment losses IFRS 9	42	(733)	(115)	(618)	>+ 100.0
Provisions for risks and charges	43	11	313	(302)	(96.5)
Restructuring costs	44	(35)	(363)	+ 328	(90.4)
Net gains/(losses) on disposals of investments	45	(4)	(15)	+ 11	(73.3)
PROFIT/(LOSS) BEFORE TAX AND IMPAIRMENT ON GOODWILL		**1,072**	**1,491**	**(419)**	**(28.1)**
Impairment on goodwill	46	—	(130)	+ 130	(100.0)
PROFIT/(LOSS) BEFORE TAX		**1,072**	**1,361**	**(289)**	**(21.2)**
Income tax for the period	47	(404)	(533)	+ 129	(24.2)
PROFIT/(LOSS) AFTER TAX		**668**	**828**	**(160)**	**(19.3)**
CONSOLIDATED PROFIT/(LOSS)		**668**	**828**	**(160)**	**(19.3)**
attributable to the shareholder of UniCredit Bank AG		668	811	(143)	(17.6)
attributable to minorities		—	17	(17)	(100.0)

1 The item “Interest income” contains interest of €2,486 million calculated using the effective interest method (previous-year period: €2,935 million). The figure is based on classification according to IFRS 9.

Earnings per share

(in €)

	NOTES	2020	2019
Earnings per share (undiluted and diluted)	48	0.83	1.01

Consolidated Statement of Total Comprehensive Income

(€ millions)

	2020	2019
Consolidated profit recognised in the income statement	**668**	**828**
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)	(201)	(624)
Allocation to/withdrawal from the revaluation surplus for owner-occupied property (IAS 16)	75	1,253
Change in the fair value of financial liabilities at FVTPL attributable		
to changes in the default risk (own credit spread reserve)	(13)	(19)
Other changes	1	—
Taxes on income and expenses not to be reclassified to the income statement in future periods	19	(217)
Income and expenses to be reclassified to the income statement in future periods		
Changes from foreign currency translation	(8)	1
Changes in the measurement of financial instruments (hedge reserve)	(4)	6
Unrealised gains/(losses)	(4)	6
Gains/(losses) reclassified to the income statement	—	—
Changes in the measurement of financial instruments at FVTOCI (FVTOCI reserve)	21	16
Unrealised gains/(losses)	40	20
Gains/(losses) reclassified to the income statement	(19)	(4)
Other changes	(6)	(8)
Taxes on income and expenses to be reclassified to the income statement in future periods	(4)	(3)
Total income and expenses recognised in equity through other comprehensive income	**(120)**	**405**
Total comprehensive income	**548**	**1,233**
of which:		
attributable to the shareholder of UniCredit Bank AG	548	1,216
attributable to minorities	—	17

Consolidated Balance Sheet

ASSETS	NOTES	31/12/2020 € millions	31/12/2019 € millions	CHANGE € millions	CHANGE in %
Cash and cash balances	49	47,531	26,215	+ 21,316	+ 81.3
Financial assets held for trading	50	82,705	69,853	+ 12,852	+ 18.4
Financial assets at FVTPL	51	11,444	15,474	(4,030)	(26.0)
Financial assets at FVTOCI	52	12,471	14,673	(2,202)	(15.0)
Loans and receivables with banks (at cost)	53	33,973	31,842	+ 2,131	+ 6.7
Loans and receivables with customers (at cost)	54	144,247	139,632	+ 4,615	+ 3.3
Hedging derivatives	56	372	264	+ 108	+ 40.9
Hedge adjustment of hedged items					
in the portfolio fair value hedge		70	40	+ 30	+ 75.0
Investments in associates and joint ventures					
accounted for using the equity method	57	11	10	+ 1	+ 10.0
Property, plant and equipment	58	2,525	2,507	+ 18	+ 0.7
Investment properties	59	352	353	(1)	(0.3)
Intangible assets	60	8	15	(7)	(46.7)
of which goodwill		—	—	—	—
Tax assets		1,031	1,184	(153)	(12.9)
Current tax assets		88	103	(15)	(14.6)
Deferred tax assets		943	1,081	(138)	(12.8)
Non-current assets or disposal groups held for sale	61	778	444	+ 334	+ 75.2
Other assets	62	606	1,092	(486)	(44.5)
TOTAL ASSETS		**338,124**	**303,598**	**+ 34,526**	**+ 11.4**

LIABILITIES	NOTES	31/12/2020 € millions	31/12/2019 € millions	CHANGE € millions	in %
Deposits from banks	64	73,507	70,321	+ 3,186	+ 4.5
Deposits from customers	65	143,803	125,394	+ 18,409	+ 14.7
Debt securities in issue	66	31,743	28,256	+ 3,487	+ 12.3
Financial liabilities held for trading	67	56,951	46,665	+ 10,286	+ 22.0
Financial liabilities at FVTPL	68	5,736	5,936	(200)	(3.4)
Hedging derivatives	69	734	813	(79)	(9.7)
Hedge adjustment of hedged items					
in the portfolio fair value hedge	70	1,941	1,636	+ 305	+ 18.6
Tax liabilities		1,173	1,062	+ 111	+ 10.5
Current tax liabilities		737	548	+ 189	+ 34.5
Deferred tax liabilities		436	514	(78)	(15.2)
Liabilities of disposal groups held for sale	71	631	—	+ 631	>+ 100.0
Other liabilities	72	1,207	1,857	(650)	(35.0)
Provisions	73	2,823	2,743	+ 80	+ 2.9
Shareholders' equity	74	17,875	18,915	(1,040)	(5.5)
Shareholders' equity attributable to the shareholder					
of UniCredit Bank AG		16,185	18,925	(2,740)	(14.5)
Subscribed capital		2,407	2,407	—	—
Additional paid-in capital		9,791	9,791	—	—
Other reserves		3,528	3,379	+ 149	+ 4.4
Currency reserves		9	17	(8)	(47.1)
Changes in valuation of financial instruments		50	43	+ 7	+ 16.3
Hedge reserve		21	28	(7)	(25.0)
FVTOCI reserve		29	15	+ 14	+ 93.3
Profit available for distribution		400	3,288	(2,888)	(87.8)
Additional Tier 1 capital		1,700	—	+ 1,700	>+ 100.0
Minority interests		(10)	(10)	—	—
TOTAL LIABILITIES		**338,124**	**303,598**	**+ 34,526**	**+ 11.4**

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 the net income for the year of €533 million generated in the reporting year less the transfer to other retained earnings of €133 million. We will propose to the Shareholders' Meeting to pass a resolution that a dividend totalling €400 million be paid 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.
The profit available for distribution of €3,288 million reported in the previous year was distributed to UniCredit on 2 November 2020 in accordance with a resolution adopted by the Shareholders' Meeting on 23 June 2020.

Statement of Changes in Consolidated 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 OBLIGA-TIONS (IAS 19)
Shareholders' equity at 1/1/2020	**2,407**	**9,791**	**3,379**	**(13)**	**852**	**(1,806)**
Consolidated profit/(loss) recognised in the consolidated income statement	**—**	**—**	**—**	**—**	**—**	**—**
Total income and expenses recognised in equity through other comprehensive income[3]	**—**	**—**	**(119)**	**(9)**	**50**	**(158)**
Unrealised gains/(losses) due to changes in the measurement of financial instruments	—	—	41	(9)	50	—
Gains/(losses) reclassified to the income statement	—	—	—	—	—	—
Actuarial gains/(losses) on defined benefit plans	—	—	(160)	—	—	(160)
Changes from foreign currency translation	—	—	—	—	—	—
Other changes	—	—	—	—	—	2
Total other changes in equity	**—**	**—**	**268**	**(2)**	**(10)**	**—**
Capital increase	—	—	—	—	—	—
Reclassification from equity reserves to retained earnings	—	—	—	(2)	(10)	—
Dividend payouts	—	—	—	—	—	—
Payouts on additional Tier 1 capital	—	—	—	—	—	—
Transfers to/withdrawals from profit available for distribution	—	—	268	—	—	—
Changes in group of consolidated companies	—	—	—	—	—	—
Capital decreases	—	—	—	—	—	—
Shareholders' equity at 31/12/2020	**2,407**	**9,791**	**3,528**	**(24)**	**892**	**(1,964)**
Shareholders' equity at 1/1/2019	**2,407**	**9,791**	**5,465**	**—**	**—**	**(1,230)**
Change in disclosure of valuation allowance on deferred taxes	—	—	—	—	—	(130)
Shareholders' equity at 1/1/2019 (after changes)	**2,407**	**9,791**	**5,465**	**—**	**—**	**(1,360)**
Consolidated profit/(loss) recognised in the consolidated income statement	**—**	**—**	**—**	**—**	**—**	**—**
Total income and expenses recognised in equity through other comprehensive income[3]	**—**	**—**	**393**	**(13)**	**852**	**(446)**
Unrealised gains/(losses) due to changes in the measurement of financial instruments	—	—	(13)	(13)	—	—
Gains/(losses) reclassified to the income statement	—	—	—	—	—	—
Actuarial gains/(losses) on defined benefit plans	—	—	(446)	—	—	(446)
Changes from foreign currency translation	—	—	—	—	—	—
Other changes	—	—	—	—	—	—
Effect of first-time adoption upon transition to revaluation model IAS 16	—	—	852	—	852	—
Total other changes in equity	**—**	**—**	**(2,479)**	**—**	**—**	**—**
Dividend payouts	—	—	—	—	—	—
Transfers to/withdrawals from profit available for distribution	—	—	(2,477)	—	—	—
Changes in group of consolidated companies	—	—	(2)	—	—	—
Capital decreases	—	—	—	—	—	—
Shareholders' equity at 31/12/2019	**2,407**	**9,791**	**3,379**	**(13)**	**852**	**(1,806)**

1 The Shareholders' Meeting of 23 June 2020 resolved to distribute the 2019 consolidated profit 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. The Shareholders' Meeting of 3 June 2019 resolved to distribute the 2018 consolidated profit in the amount of €520 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €0.65 per share.
2 UniCredit Bank AG (HVB).
3 See consolidated statement of total comprehensive income.

(€ millions)

	CHANGE IN MEASUREMENT OF FINANCIAL INSTRUMENTS						
CURRENCY RESERVE	HEDGE RESERVE	FVTOCI RESERVE	PROFIT AVAILABLE FOR DISTRIBUTION[1]	TOTAL SHAREHOLDERS' EQUITY ATTRIBUTABLE TO THE SHAREHOLDER OF HVB[2]	ADDITIONAL TIER 1 CAPITAL	MINORITY INTERESTS	TOTAL SHAREHOLDERS' EQUITY
17	28	15	3,288	18,925	—	(10)	18,915
—	—	—	668	668	—	—	668
(8)	(7)	14	—	(120)	—	—	(120)
—	(3)	27	—	65	—	—	65
—	—	(13)	—	(13)	—	—	(13)
—	—	—	—	(160)	—	—	(160)
(8)	—	—	—	(8)	—	—	(8)
—	(4)	—	—	(4)	—	—	(4)
—	—	—	(3,556)	(3,288)	1,700	—	(1,588)
—	—	—	—	—	1,700	—	1,700
—	—	—	—	—	—	—	—
—	—	—	(3,288)	(3,288)	—	—	(3,288)
—	—	—	—	—	—	—	—
—	—	—	(268)	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
9	21	29	400	16,185	1,700	(10)	17,875
16	28	4	520	18,231	—	36	18,267
—	—	—	—	—	—	—	—
16	28	4	520	18,231	—	36	18,267
—	—	—	811	811	—	17	828
1	—	11	—	405	—	—	405
—	5	14	—	6	—	—	6
—	—	(3)	—	(3)	—	—	(3)
—	—	—	—	(446)	—	—	(446)
1	—	—	—	1	—	—	1
—	(5)	—	—	(5)	—	—	(5)
—	—	—	—	852	—	—	852
—	—	—	1,957	(522)	—	(63)	(585)
—	—	—	(520)	(520)	—	—	(520)
—	—	—	2,477	—	—	—	—
—	—	—	—	(2)	—	(63)	(65)
—	—	—	—	—	—	—	—
17	28	15	3,288	18,925	—	(10)	18,915

Consolidated Cash Flow Statement

(€ millions)

	2020	2019
Consolidated profit/(loss)	**668**	**828**
Write-downs, provisions for losses on, and write-ups of, loans and receivables and		
additions to provisions for losses on guarantees and indemnities	782	163
Write-downs and depreciation less write-ups on non-current assets	128	483
Change in other non-cash positions	(4,249)	1,690
Gains/(losses) on non-current assets	(3)	(124)
Other adjustments (net interest and dividend income from the income statement, taxes on income paid)	(2,425)	(2,450)
Subtotal	**(5,099)**	**590**
Change in assets and liabilities from operating activities after correction for non-cash components		
Increase in assets/decrease in liabilities (-)		
Decrease in assets/increase in liabilities (+)		
Financial assets held for trading	(2,080)	2,046
Financial assets at FVTPL	4,027	1,208
Financial assets at FVTOCI	2,224	(7,288)
Loans and receivables with banks (at cost)	(2,352)	1,987
Loans and receivables with customers (at cost)	(5,284)	(6,041)
Other assets from operating activities	201	(369)
Deposits from banks	3,286	6,941
Deposits from customers	18,591	4,395
Debt securities in issue	3,541	3,985
Other liabilities from operating activities	3,882	(2,492)
Taxes on income	(124)	(130)
Interest received	3,979	3,906
Interest paid	(1,648)	(1,576)
Dividends received	170	212
Cash flows from operating activities	**23,314**	**7,374**
Proceeds from the sale of investments	(4)	2,044
Proceeds from the sale of property, plant and equipment	8	105
Payments for the acquisition of investments	—	(1,796)
Payments for the acquisition of property, plant and equipment	(249)	(445)
Effects of the change in the group of companies included in consolidation	—	101
Effect of the disposal of discontinued operations	—	—
Cash flows from investing activities	**(245)**	**9**

(€ millions)

	2020	2019
Change in additional paid-in capital	—	—
Dividend payments	(3,288)	(520)
Issue of subordinated liabilities and hybrid capital	1,700	—
Repayment/buy-back of subordinated liabilities and hybrid capital	(9)	(130)
Changes in cash from other change in equity	(156)	(508)
Cash flows from financing activities	**(1,753)**	**(1,158)**
Cash and cash equivalents at end of previous period	**26,215**	**19,990**
Cash flows from operating activities	**23,314**	**7,374**
Cash flows from investing activities	**(245)**	**9**
Cash flows from financing activities	**(1,753)**	**(1,158)**
Effects of exchange rate changes	—	—
Less non-current assets or disposal groups held for sale	—	—
Cash and cash equivalents at end of period	**47,531**	**26,215**

Legal Basis

UniCredit Bank AG (HVB) is a universal bank with its registered office and principal place of business in Arabellastrasse 12, Munich, Germany. It is filed under HRB 42148 in the B section of the Commercial Register maintained by Munich District Court. HVB is an affiliate of UniCredit S.p.A., Milan, Italy (ultimate parent company) in whose consolidated financial statements HVB Group is included. These are published on the UniCredit corporate group's website at the following address: https://www.unicreditgroup.eu/en/investors/financial-reports.html.

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. Further information on the Bank's products and services is provided in the Note "Components of segment reporting by business segment" in the notes to these consolidated financial statements.

As a capital market-oriented company, HVB prepares its financial statements in accordance with the requirements of the International Accounting Standards Board (IASB) in the version adopted by the EU. This provides a reliable and internationally comparable basis for evaluating the assets, liabilities, financial position and profit or loss of HVB Group. Our value-based management is similarly based on these accounting principles.

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) pursuant to EU Commission Regulation 1606/2002 of the European Parliament and of the Council of 19 July 2002 (IAS Regulation) together with further regulations regarding the adoption of certain IFRS within the framework of the EU endorsement in conjunction with Section 315e (1) of the German Commercial Code (Handelsgesetzbuch – HGB) as non-exempt consolidated financial statements compliant with Section 4 of the IAS Regulation. Besides the standards defined as IFRS, the IFRS also comprise the existing International Accounting Standards (IAS) together with the interpretations known as IFRICs and SICs of the IFRS Interpretations Committee (IFRS IC) and its predecessor organisation. All the standards and interpretations subject to mandatory application in the EU for the 2020 financial year have been applied. Section 315e HGB also contains national regulations to be applied alongside the IFRS by capital market-oriented companies.

The present consolidated financial statements were prepared by HVB's Management Board on 9 March 2021 and will be submitted to the Supervisory Board on 26 March 2021 for approval.

Management's Discussion and Analysis meets the requirements of Section 315 (1, 2 and 4) HGB and incorporates a risk report pursuant to Section 315 HGB.

Legal Basis (Continued)

Compliant with Section 264b HGB, the following partnerships are exempted from the obligation to prepare a management report and publish their annual financial statements:
– A & T-Projektentwicklungs GmbH & Co. Potsdamer Platz Berlin KG, Munich
– Acis Immobilien- und Projektentwicklungs GmbH & Co. Oberbaum City KG, Grünwald
– Acis Immobilien- und Projektentwicklungs GmbH & Co. Parkkolonnaden KG, Grünwald
– Acis Immobilien- und Projektentwicklungs GmbH & Co. Stuttgart Kronprinzstraße KG, Grünwald
– Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Alpha Management KG, Munich
– Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Gamma Management KG, Munich
– Grundstücksgesellschaft Simon beschränkt haftende Kommanditgesellschaft, Munich
– HAWA Grundstücks GmbH & Co. oHG Hotelverwaltung, Munich
– HAWA Grundstücks GmbH & Co. OHG Immobilienverwaltung, Munich
– H.F.S. Leasingfonds Deutschland 1 GmbH & Co. KG (Immobilienleasing), Munich
– H.F.S. Leasingfonds Deutschland 7 GmbH & Co. KG, Munich
– HVB Gesellschaft für Gebäude mbH & Co. KG, Munich
– HVZ GmbH & Co. Objekt KG, Munich
– Hypo-Bank Verwaltungszentrum GmbH & Co. KG Objekt Arabellastraße, Munich
– Omnia Grundstücks-GmbH & Co. Objekt Haidenauplatz KG, Munich
– Omnia Grundstücks-GmbH & Co. Objekt Perlach KG, Munich
– Othmarschen Park Hamburg GmbH & Co. Centerpark KG, Munich
– Othmarschen Park Hamburg GmbH & Co. Gewerbepark KG, Munich
– Portia Grundstücks-Verwaltungsgesellschaft mbH & Co. Objekt KG, Munich
– Salvatorplatz-Grundstücksgesellschaft mbH & Co. oHG Saarland, Munich
– Salvatorplatz-Grundstücksgesellschaft mbH & Co. OHG Verwaltungszentrum, Munich
– Solos Immobilien- und Projektentwicklungs GmbH & Co. Sirius Beteiligungs KG, Munich
– TERRENO Grundstücksverwaltung GmbH & Co. Entwicklungs- und Finanzierungsvermittlungs KG, Munich
– TRICASA Grundbesitz Gesellschaft mbH & Co. 1. Vermietungs KG, Munich
– Vermietungsgesellschaft mbH & Co. Objekt MOC KG, Munich

Compliant with Section 264 (3) HGB, the following corporations are exempted from the obligation to prepare a management report and publish their annual financial statements:
– Argentaurus Immobilien-Vermietungs- und Verwaltungs GmbH, Munich
– Food & more GmbH, Munich
– HVB Immobilien AG, Munich
– HVB Projekt GmbH, Munich
– HVB Secur GmbH, Munich
– HVB Tecta GmbH, Munich
– HVB Verwa 4 GmbH, Munich
– HVB Verwa 4.4 GmbH, Munich
– Interra Gesellschaft für Immobilienverwaltung mbH, Munich
– MERKURHOF Grundstücksgesellschaft mit beschränkter Haftung, Munich
– NF Objekt FFM GmbH, Munich
– NF Objekte Berlin GmbH, Munich
– Orestos Immobilien-Verwaltungs GmbH, Munich
– Selfoss Beteiligungsgesellschaft mbH, Grünwald
– Spree Galerie Hotelbetriebsgesellschaft mbH, Munich
– UniCredit Direct Services GmbH, Munich
– UniCredit Beteiligungs GmbH, Munich
– Verwaltungsgesellschaft Katharinenhof m.b.H., Munich

Accounting and Valuation

1 Reporting date/period

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

2 Uniform Group accounting policies

The separate financial statements of the domestic and foreign subsidiaries are incorporated in the consolidated financial statements of HVB Group in accordance with uniform principles of accounting and valuation. Where options have been exercised, the details are explained under the balance sheet items concerned.

3 Consistency

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

The following accounting, valuation and disclosure principles have been amended:

Change to the revaluation model for owner-occupied land and buildings

With effect as of 31 December 2019, HVB Group changed the subsequent measurement of the properties used by the Bank (land and buildings) falling within the scope of IAS 16 that are classified as property, plant and equipment from the previous cost model to the revaluation model pursuant to IAS 16.31. In the context of the first-time application of the revaluation method, carrying amounts were adjusted to the fair value on the revaluation date of 31 December 2019. The related effects at year-end 2019 on the consolidated financial statements of HVB Group were described in detail in the Note "Consistency" in the notes to the consolidated financial statements of the 2019 Annual Report. The change in accounting method was carried out prospectively in accordance with IAS 8.17 in conjunction with IAS 16.80A. The accounting and valuation changes associated with the revaluation model for the 2020 financial year and subsequent periods are presented in detail in the accounting and valuation methods contained in the Note "Property, plant and equipment".

Statement of changes in equity – Currency reserve

In the course of adjusting the statement of changes in equity due to the changeover to the revaluation method for owner-occupied property, we have decided to also show the currency reserve as a separate item in equity. Exchange rate differences resulting from the translation of the financial statements of foreign business units are recognised directly in equity in the currency reserve item. Previously, these effects were included in other reserves. The figures for the previous year have been adjusted. The change increases the transparency of the presentation of equity for the reader of the financial statements, so that these changes in recognition provide more reliable and relevant information.

Accounting and Valuation (Continued)

Change in recognition of value adjustments to deferred taxes

HVB determines deferred taxes for all temporary differences between the amounts recognised in accordance with IFRS and the relevant values stated for tax-reporting purposes to the extent that they are permitted by the rules set forth in IAS 12. Recognition of deferred taxes follows the underlying item: if it is reported through profit or loss in the income statement, the deferred taxes are also reported through profit or loss and if the valuation differences affect other comprehensive income or equity, the deferred taxes are also recognised in other comprehensive income or equity, respectively. In a second step, the temporary differences so determined are examined with a view to whether these differences could reverse over a given period and whether sufficient taxable profit is available against which the temporary differences can be offset. Deferred taxes are only recognised when these conditions are met; otherwise, the initially accrued deferred taxes are eliminated again. For reasons of simplification, such value adjustments to deferred taxes have been carried out in the past through profit or loss. In the 2020 financial year, recognition was adapted so that the relevant value adjustments are divided up between the income statement and other comprehensive income or equity in proportion to the amount of the temporary differences. The adjustment of the amount recognised is carried out retrospectively.

Accordingly, the value adjustments of €316 million, which from 1 January 2019 had been included in full in retained earnings, are divided up: value adjustments to deferred taxes in the amount of €130 million relating to deferred taxes recognised directly in equity are reclassified in favour of retained earnings to the item "Pensions and similar obligations (IAS 19)" in other retained earnings in equity. The remaining share of €186 million relates to value adjustments attributable to deferred taxes recognised through profit or loss and can therefore continue to be reported under retained earnings. The income tax expense in 2019 has declined by €18 million to €533 million, while the tax expense recognised in other comprehensive income in 2019 on income and expenses not to be reclassified to the income statement in future periods has risen by €18 million to €217 million. Consolidated profit attributable to the shareholders of UniCredit Bank AG has risen accordingly by €18 million and the consolidated profit attributable to minorities remains unchanged while earnings per share has increased by 2 cents per share. In the 2020 financial year, value adjustments to deferred taxes in the amount of €35 million are recognised through profit or loss, while value adjustments to deferred taxes in other comprehensive income are carried out in the amount of minus €31 million. Consolidated profit attributable to the shareholders of UniCredit Bank AG has increased accordingly by €31 million due to the change in recognition, the consolidated profit attributable to minorities remains unchanged while earnings per share has increased by 4 cents per share.

Changes in estimates have been recognised in net income for the period affected by the change in the estimation method. Provided the change in the estimation method does not affect the income statement, the carrying amount of the asset, liability or equity item concerned has been adjusted.

The consolidated financial statements are prepared under the assumption of a going concern. Accounting and valuation in accordance with IFRS contains values that have been determined reliably using estimates and assumptions. The estimates and assumptions applied are based on past experience and other factors such as budgets, expectations and forecasts regarding future events which seem appropriate under the present circumstances. This mainly affects the determination of the fair value of certain financial assets and liabilities, impairments in the lending business, deferred taxes, and the accounting and valuation of provisions. The actual values may differ from the assumptions and estimates made.

The following matters in particular are affected by estimates, assumptions and discretionary decisions:

– Measurement of goodwill:
  The multi-year plan drawn up by HVB Group forms the main basis for the impairment test for goodwill. The multi-year plan contains forecasts of future trends in terms of both the Bank's respective business units and macroeconomic developments. This means that the impairment test for goodwill is also subject to estimates, assumptions and discretionary decisions.
– Determination of impairments (IFRS 9):
  Scenarios of the anticipated cash flows of debt instruments serve as a basis for determining the expected credit losses. This means that, to determine the impairments, assumptions and forecasts must be made regarding the payments that may still be received from the borrower and/or proceeds from the realisation of the collateral and the probability of occurrence of the respective scenario must be estimated. This is carried out collectively for debt instruments at Stage 1 and Stage 2 and for insignificant individual cases at Stage 3 while the assumptions and estimates are made individually for significant individual cases at Stage 3.

- Determination of fair value:
  HVB Group employs internal models to determine the fair value of financial instruments for which no price is available on an active market. The application of these internal models presupposes assumptions and forecasts, among other things, the scope of which depends on the complexity of the financial instruments and the valuation parameters derived from market data.
  Determining the fair value of real estate as non-financial assets also requires discretionary decisions to a certain degree. As self-occupied land and buildings, as well as investment properties, are unique, there is generally no observable market data available for such properties. As a result, the value of this real estate is periodically assessed by independent external assessors, using recognised appraisal methods, and the valuation parameters, such as rents, are estimated based on market information.
- Provisions:
  Provisions are recognised for present or future obligations to cover the payments required to settle these obligations. In this context, it is necessary to estimate the amount of these expenses or costs and also the date at which the liabilities are expected to be settled. This involves making assumptions regarding the actual amount of the costs occurring and, in the case of long-term provisions, also determining possible cost increases up until the settlement date. If the settlement date is more than one year in the future, the forecast expenses and costs are discounted over the period until the liability is settled. If provisions are set up for future audits of tax returns by the tax authorities, the anticipated additional tax payments are not discounted. Instead the interest charged by the tax authorities on the additional amounts payable are added together. The uncertainties in making estimates are greater in this case as the interpretation of tax issues is constantly evolving and is also applied retrospectively.
- Deferred tax assets and liabilities:
  Apart from a few exceptions defined in the standard, deferred tax assets and liabilities are recognised for all temporary differences between the values stated in accordance with IFRS and the values stated for tax-reporting purposes (liability method). Accounting and valuation are performed in accordance with IAS 12 on the basis of local tax regulations that are expected to apply to the period when an asset is realised or a liability is settled. The regulations and applicable local tax rates are assumed that are enacted or substantively enacted at the reporting date. Deferred tax assets are not recognised to the extent that it seems unlikely that sufficient taxable profit will be available in future periods.
  Furthermore, deferred tax assets are recognised for unused tax losses carried forward and unused tax credits to the extent that recoverability is demonstrated. This is done on the basis of a five-year plan for HVB Group, which is subject to segment-specific and macroeconomic assumptions and takes account of local tax regulations.
- Share-based compensation:
  Assumptions must similarly be made to determine the cost of share-based compensation programmes. The costs for the instruments to be transferred are amortised over the vesting period or the beneficiaries' claims expire if they leave UniCredit first. This makes it necessary to forecast what proportion of employees will leave UniCredit during the vesting period. At the same time, the shares granted must be measured at fair value at the grant date. The comments made above regarding the determination of fair value are applicable analogously.
- Property, plant and equipment:
  Depreciable items of property, plant and equipment are depreciated over their useful lives. Since the useful life is not independent of the usage of the actual asset in question, it must be estimated in the light of the circumstances in each case.
- Intangible assets:
  With the exception of goodwill, intangible assets are amortised over their useful life. Here, too, suitable assumptions must be made to estimate the useful life.

Apart from this, the accounting, valuation and disclosure principles applied in the 2020 financial year are the same as those applied in the consolidated financial statements for 2019, with the exception of the new IFRS rules to be applied as described in the Note "Initial adoption of new IFRS accounting rules".

Accounting and Valuation (Continued)

4 Initial adoption of new IFRS accounting rules
No new standards or interpretations issued by the IASB were applicable in the 2020 financial year.

The amendments to the following standards revised by the IASB were subject to mandatory application in the European Union (EU) for the first time in the 2020 financial year:
– Amendments to IFRS 3 "Business Combinations" – Definition of a Business
– Amendments to IFRS 9 "Financial Instruments"; IAS 39 "Financial Instruments: Recognition and Measurement" and IFRS 7 "Financial Instruments: Disclosures" – Interest Rate Benchmark Reform
– Amendments to IAS 1 "Presentation of Financial Statements" and IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" – Definition of Material
– Amendments to References in the Conceptual Framework in IFRS Standards
– Amendments to IFRS 16 "Leases" – Covid-19-Related Rent Concessions

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

The amendments to IFRS 9 "Financial Instruments", IAS 39 "Financial Instruments: Recognition and Measurement" and IFRS 7 "Financial Instruments: Disclosures" – Interest Rate Benchmark Reform are applicable for the first time for financial years beginning on or after 1 January 2020. These amendments are intended to eliminate uncertainties arising from the replacement of interest rate benchmarks in the context of the Interbank Offered Rates (IBOR) reform.

HVB Group thus assumes that hedged cash flows based on interest rate benchmarks will remain unchanged in the course of the reform and thus continue to be seen as highly probable. It is also assumed that cash flows of the hedging instrument and the hedged item based on interest rate benchmarks will remain unchanged following the reform which means that the prospective assessment of the efficiency of the hedge is not required to be adjusted due to the interest rate benchmark reform. Moreover, it is assumed that the interest rate benchmark reform will not affect the identification of the independent components designated as hedged risk.

This affects both the hedging of interest rate risks by both micro fair value hedges and the portfolio fair value hedge, which are presented in the Note "Net gains/losses on financial assets and liabilities at fair value".

In summer 2020, the German government passed the ESEF Transposition Act, which took effect from 19 August 2020. The act transposes the requirements of the amended Transparency Directive into German law. In accordance with this legislation, HVB as a corporation affected by the act as a domestic issuer must publish its financial reports and other documentation compliant with Section 328 (1) HGB in a uniform electronic format. For this purpose, an electronic ESEF reporting package is to be created with documents in eXtensible Hyper-Text Markup Language (XHTML), a text-based markup language. These documents are readable in an internet browser. In addition, the consolidated financial statements are to be tagged according to a prescribed scheme (ESEF taxonomy). This is implemented via the eXtensible Business Reporting Language (XBRL). In the 2020 Annual Report, tagging is only necessary for the primary financial statements and selected notes, but the requirement will become more comprehensive in the following years. Embedding the XBRL markup in XHTML documents also makes them machine-readable.

5 Published IFRS that are not yet the subject of mandatory adoption and that have not been the subject of early adoption

As permitted, HVB Group has decided against the early voluntary adoption of the standards and interpretations adopted or revised by the IASB, which become the subject of mandatory adoption for the 2021 financial year or thereafter. HVB Group will apply 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 4 "Insurance Contracts" – Extension of the Temporary Exemption from Applying IFRS 9 "Financial Instruments" until 1 January 2023. The rules are subject to mandatory application for the first time for financial years beginning on or after 1 January 2021.
– 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 rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2021.

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

– IFRS 17 "Insurance Contracts". 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. The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2023.
– Amendments to IFRS 3 "Business Combinations", IAS 16 "Property, Plant and Equipment", IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", annual improvements to the IFRS – cycle 2018–2020. The rules are subject to mandatory adoption for the first time for financial years beginning on or after 1 January 2022.
– Amendments to IAS 1 "Presentation of Financial Statements" and to the IFRS Practice Statement 2 – Disclosures of Accounting Policies. 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. 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 applied in the future to have any significant effects on the consolidated financial statements.

6 Companies included in consolidation

The group of companies included in consolidation by HVB Group encompasses 141 (previous year: 135) controlled companies, of which 44 (previous year: 36) are classified as structured entities within the meaning of IFRS 12.

	2020	2019
Total controlled companies	**300**	**290**
Consolidated companies	141	135
of which: structured entities according to IFRS 12	44	36
Non-consolidated companies	**159**	**155**
Joint ventures	**2**	**2**
of which: accounted for using the equity method	—	—
Associates	**3**	**4**
of which: accounted for using the equity method	1	2

Accounting and Valuation (Continued)

At year-end 2020, we had a total of 163 (previous year: 159) controlled companies, associates and joint ventures in HVB Group that were neither fully consolidated nor fully accounted for using the equity method as they are not of material importance to the Group.

The structured entities include three borrowers (previous year: three) over which HVB gained control during the course of restructuring or resolution. The borrowers are classified as structured entities within the meaning of IFRS 12 as, on account of their financial difficulties, they are controlled by their credit relationship with HVB and no longer by voting rights. Not all of the borrowers are disclosed in the Note "List of holdings", for data protection reasons. Three (previous year: three) of these borrowers have been consolidated. As in the previous year, there were no borrowers who have not been consolidated for materiality reasons.

The effects on the balance sheet of the contractual relationships between the Group companies and these non-consolidated companies are included in the consolidated financial statements. The aggregate amounts of net income for the year of these minor non-consolidated companies makes up 2.35% (previous year: 1.06%) of the consolidated profit of HVB Group, while such companies provide around 0.06% (previous year: 0.07%) of consolidated assets. The aggregate amounts of net income for the year of minor companies not accounted for using the equity method (joint ventures and associates) amounts to 0.0008% (previous year: 0.03%) of the consolidated profit, their share in the Group capital is 0.0004% (previous year: 0.0004%). Our interests in these companies are carried as "Financial assets at FVTPL" and loans extended under "Loans and receivables with customers (at cost)".

Controlled companies
The group of companies included in consolidation has been defined taking into account materiality criteria. In addition, smaller companies that are below the materiality thresholds have also been consolidated on account of the rules defined by the banking supervisory authorities that regulate UniCredit. The fully consolidated companies prepared their annual financial statements for the period ending 31 December 2020.

In accordance with IFRS 12, 44 (previous year: 36) fully consolidated controlled entities are classified as structured entities. Please refer to the Note "Disclosures regarding structured entities" for more information on structured entities.

There were significant restrictions on the ability of HVB Group to access assets of the controlled companies as follows:
– Subsidiaries classified as credit institutions or financial services institutions for supervisory purposes are subject to the provisions of the German Banking Act, the CRR and MaRisk/ICAAP regarding their capital base. The equity capital to be maintained under these provisions limits the ability of HVB Group to adopt resolutions regarding dividend distributions.
– Fully consolidated structured entities are not generally included in the consolidated financial statements on account of HVB Group's position as a shareholder. Accordingly, HVB Group has no ability to decide on dividend distributions and is bound by the contractual arrangements (such as lending agreements or derivative contracts).

The non-controlling interests at 31 December 2020 have no significant effects on the consolidated financial statements of HVB Group either individually or in aggregate. At 31 December 2020 third parties hold non-controlling interests in 51 (previous year: 44) fully consolidated companies. The non-controlling interests are shown separately in the consolidated balance sheet and generally participate in the profits and losses of the companies; their shareholders hold voting rights in the companies, but without breaking the controlling influence of HVB Group.

The following companies were newly added to the group of companies included in consolidation at HVB Group in 2020:
– Elektra Purchase No. 69 DAC, Dublin
– Elektra Purchase No. 74 DAC, Dublin
– H.F.S. Leasingfonds GmbH & Co. Deutschland 8 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 9 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 10 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 11 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 12 KG, Ebersberg
– Ice Creek Pool No. 2 DAC, Dublin
– Rosenkavalier 2020 UG, Frankfurt am Main
– Wealthcap Immobilien 43 Komplementär GmbH, Munich
– Wealthcap Objekt Mainz GmbH & Co. KG, Munich
– Wealthcap Objekt Stuttgart III GmbH & Co KG, Munich
– Wealthcap Objekt Tübingen GmbH & Co. KG, Munich
– Wealthcap Spezial-AIF-SV Büro 8, Grünwald
– Wealthcap Wohnen Spezial-AIF 1 GmbH & Co. geschlossene Investment KG, Munich

Within the framework of ongoing tax proceedings, it was necessary to reactivate the following companies:
– H.F.S. Leasingfonds GmbH & Co. Deutschland 8 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 9 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 10 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 11 KG, Ebersberg
– H.F.S. Leasingfonds GmbH & Co. Deutschland 12 KG, Ebersberg

Taking account of the current situation of the five companies, control of these companies as defined by IFRS 10 rests with HVB, which means that these were included in the group of consolidated companies at year-end 2020.

Wealthcap Objekt Tübingen GmbH & Co. KG and Wealthcap Wohnen Spezial-AIF 1 GmbH & Co. geschlossene Investment KG were fully consolidated over the course of the year, and then deconsolidated.

The following companies left the group of companies included in consolidation of HVB Group in 2020 due to merger, imminent or completed liquidation or cessation of control:
– Elektra Purchase No. 34 DAC, Dublin
– Elektra Purchase No. 63 DAC, Dublin
– HJS 12 Beteiligungsgesellschaft mbH, Munich
– Wealthcap Objekt Ludwigsburg GmbH & Co. KG, Munich
– Wealthcap Objekt Tübingen GmbH & Co. KG, Munich
– Wealthcap Wohnen 1 GmbH & Co. KG, Munich
– Wealthcap Wohnen 1a GmbH & Co. KG, Munich
– Wealthcap Wohnen Spezial-AIF 1 GmbH & Co. geschlossene Investment KG, Munich

Accounting and Valuation (Continued)

The following companies left the group of companies included in consolidation in 2020 for materiality reasons:
– Adler Funding LLC, Dover
– Bertram Projekt Unodecima Technikzentrum GmbH & Co. KG, Munich

On account of the deconsolidation of the companies listed above, HVB Group realised a deconsolidation result of minus €1 million (previous-year period: minus €12 million) in accordance with IFRS 10.25 in the income statement under the item "Net gains/losses on disposals of investments".

Associates
No financial statements at 31 December 2020 were available for the associate listed below valued using the equity method when the consolidated financial statements were prepared. The following financial statements were used for valuation using the equity method:
– Comtrade Group B.V., Rotterdam 30 September 2020

There were no significant events at this company between the date when the above financial statements were prepared and 31 December 2020 that could have an impact on the assets, liabilities, financial position, and profit or loss.

The group of consolidated companies does not include any companies for which the proportionate consolidation method is applied.

7 Principles of consolidation
An enterprise (or economically separate entity) is fully consolidated when it is controlled by HVB Group. Control is deemed to exist when the following three criteria defined in IFRS 10 are met: HVB Group must have power over the relevant activities of the company and be exposed to variable income from the enterprise. In addition, HVB Group must be able to use its power to influence the variable earnings it obtains from the enterprise.

Control is independent of the type of financial relationship between parent company and subsidiary and does not require any participation in the enterprise's capital. Control may also be derived from contractual arrangements or legal provisions.

To assess whether an enterprise is controlled by HVB Group, a detailed analysis must be carried out of the business purpose, the relevant activities of the enterprise, the parties involved and the distribution of the variable income from the enterprise. The analysis includes an assessment of whether HVB Group is acting as the principal and has delegated power over the enterprise to a third party (agent). This may be the case when the decision-maker who has power over the enterprise does not pursue own economic interests out of the enterprise or these are insignificant and the decision-maker merely exercises delegated decision-making powers for HVB Group.

An enterprise is initially consolidated as soon as HVB Group gains control over the enterprise. During initial consolidation, the assets and liabilities of the enterprise measured are included at their fair values at the effective date. The uniform Group accounting and valuation policies are then applied. Expenses and income of the respective company are included in the consolidated income statement from the effective date of initial consolidation. Participating interests in a consolidated company held by third parties are carried under minority interests, provided the criteria for disclosure as shareholders' equity are met. Otherwise, they are recognised as debt.

Consolidation is performed by offsetting the purchase price of a subsidiary company against the value of the interest held in the completely remeasured shareholders' equity at the time of acquisition, provided the transactions involved are not internal to UniCredit. This amount represents the difference between the assets and liabilities of the acquired company measured at the fair value at the time of initial consolidation. The difference between the higher acquisition cost and the remeasured balance of assets and liabilities is recognised as goodwill under intangible assets in the balance sheet on a prorated basis if the purchased company is a business. If in an exceptional case the company that is being consolidated for the first time does not constitute a business and is a group of assets and liabilities instead, these assets and liabilities are measured and recognised in conformity with the applicable IFRS following the requirements of IFRS 3.2b. Any difference between the net carrying amounts calculated in this manner and the acquisition costs is recognised as an expense. Goodwill on companies accounted for using the equity method is carried under "Investments in associates and joint ventures". Compliant with IAS 36, scheduled amortisation is not taken on goodwill. The goodwill is allocated to the cash-generating units (CGU) that are expected to benefit from the synergies arising from the business combination. At HVB Group, these cash-generating units are the business segments. Where the commercial activities of a company span more than one segment, the goodwill is distributed in line with the expected contribution to results at the time of acquisition. The goodwill is tested for impairment at least once a year at cash-generating unit level. This involves comparing the carrying amount of the cash-generating unit with the recoverable amount defined as the maximum of the unit's value in use and the fair value less costs to sell.

The most recent multi-year plan approved by the Management Board normally covering a period of five years and created at segment level forms the basis for testing impairment. In this context, the earnings drivers are net trading income, net interest, net fees and commissions, operating costs and the projected net write-downs of loans and provisions for guarantees and commitments. To allow the earnings components to be planned, the multi-year plan includes an income budget as well as budgets for risk-weighted assets and loans and receivables with customers and deposits from customers. The budgets are based on forecasts by the UniCredit Economics department, with the forecasts for overall economic development (gross domestic product) and interest and inflation rates playing a crucial role.

We have used the multi-year plan as the basis for determining appropriate values in use for the CGUs to which goodwill is allocated. The values in use are determined using the discounted cash flow method. The value in use represents the present value of the profit generated by the respective segment, which can be distributed or withdrawn. The figures for profit before tax from the segments' multi-year plans are included as cash flows. Furthermore, changes to the allocated capital are taken into account in the course of determining cash flows. If the addition of allocated capital is required for a business segment to cover the higher capital backing for business growth or a higher capital backing to comply with tighter regulatory capital requirements, this addition reduces the cash flows generated by the segment as a kind of profit retention must be carried out at this amount and these amounts are not available for distribution purposes. The cash flows of the previous year in the multi-year plan are assumed for the subsequent period. The segment-specific cost of capital rates used for discounting is 15.5% (previous year: 15.6%) for the Corporate & Investment Banking business segment and 12.5% (previous year: 12.8%) for the Commercial Banking business segment. No growth factor has been assumed for the perpetual annuity. The discount rates named are pre-tax interest rates.

These values in use are employed as recoverable amounts. If they exceed the carrying amount (including the goodwill) to be tested of the CGU, no impairment of goodwill is necessary. As the recoverable amount represents the higher amount of value in use and the selling price less costs to sell, it is not necessary to estimate the selling price, unless the value in use is lower than the carrying amount. There is no longer any goodwill in the reporting year. The goodwill assigned to the Commercial Banking business segment was fully written off in the previous year.

Accounting and Valuation (Continued)

More extensive write-downs on assets of the company relevant in this case (mostly real estate used by the Bank), which are allocated to the CGU, are not necessary as pursuant to IAS 36.105 ff. such a write-down is required only if the carrying amount is higher than the fair value less costs to sell of the assets concerned. This is not the case because the assets concerned do not entail any hidden charges.

IFRS 3 is not applicable to combinations of businesses under common control (IFRS 3.2 (c)). IAS 8.10 requires an appropriate accounting and valuation method to be developed accordingly for such cases. Given that HVB Group is part of UniCredit, the carrying amounts of the parent company are retained for business combinations within UniCredit. Any difference between the purchase price paid and the net carrying amount of the company acquired is recognised in equity under reserves.

Compliant with IAS 28, shares in associates are accounted for using the equity method or the capital share method and disclosed in the balance sheet accordingly. HVB is able to exercise significant influence over associates without being able to control them. Significant influence is assumed when a company holds more than 20% but less than 50% of the voting rights in an investee. This assumption of association can be refuted where a qualitative analysis demonstrates that significant influence over the financial and strategic decisions of the investee is not possible. Shares in associates are recognised at cost upon initial inclusion in the consolidated financial statements. For the purposes of subsequent measurement, the carrying amount increases or decreases in accordance with the share of HVB in the profit or loss of the investee. This share of the investee's profit or loss attributable to HVB is measured on the basis of the fair values of the investee's assets, liabilities and contingent liabilities when the shares were acquired. The accounting and valuation principles of HVB Group are applied for subsequent measurement.

Business transactions between consolidated companies are offset. Any profits or losses arising from intercompany transactions are eliminated.

8 Financial instruments
A financial instrument is any contract that gives rise to both a financial asset of one company and a financial liability or equity instrument of another company.

The classes required by IFRS 7.6 are defined as follows:
– Cash and cash balances
– Financial assets and liabilities held for trading
– Financial assets at FVTPL
– Financial assets at FVTOCI
– Loans and receivables with banks (at cost)
– Loans and receivables with customers (at cost)
– Receivables under finance leases
– Hedging derivatives
– Other deposits from banks
– Other deposits from customers
– Other debt securities in issue
– Financial liabilities at FVTPL
– Financial guarantees and irrevocable credit commitments

With regard to the classes, the balance sheet disclosures and profit contributions of the financial instruments, among other things, must be presented separately in accordance with IFRS 9 valuation categories. In the present consolidated financial statements, we have included these in the explanatory notes to the balance sheet and the income statement. The information required by IFRS 7 regarding risks in connection with financial instruments is also provided in the Risk Report within Management's Discussion and Analysis. Compliant with IFRS 7.36 (a), the maximum credit exposure is the same as the carrying amount of the risk-bearing financial instruments or, in the case of financial guarantees and credit commitments, the nominal amount disclosed in the Note "Fair values of financial instruments compliant with IFRS 7" for the guarantee/amount of the credit commitments not yet utilised.

IFRS 9 requires all financial instruments to be recognised in the balance sheet, classified in the given valuation or portfolio categories and measured in line with this classification. In addition, debt instruments must be allocated to a business model.

Financial assets and liabilities are initially recognised from the date on which the corporate group becomes a contractual party to the financial instrument in question. HVB Group normally recognises customary market purchases and sales of financial assets (known as regular way contracts) at the settlement date. Derivatives are recognised at the trading date.

Financial assets and liabilities are derecognised when either the contractual rights or obligations to pay have expired, e.g. through repayment, or all the opportunities and risks have essentially been transferred to third parties. HVB Group did not carry out any transactions in which all the opportunities and risks were essentially either transferred or retained. If the contractual rights to an asset or liability are transferred to third parties but the opportunities and risks are essentially retained, the assets or liabilities are not derecognised.

The regulations set forth in IFRS 9 on reclassification were observed. No reclassifications were carried out.

Financial assets and liabilities at fair value through profit or loss
The "at fair value through profit or loss" category is subdivided into the following categories:

– Financial assets and liabilities held for trading:
  Financial assets and liabilities classified as held for trading at the time of initial recognition are financial instruments acquired or incurred for the purpose of short-term profit-taking as a result of changes in market prices or of realising a profit margin. This category also includes all derivatives (apart from hedging derivatives) which qualify for hedge accounting. These are disclosed in the item "Financial assets held for trading" and "Financial liabilities held for trading".
  In accordance with the provisions of IAS 32 (IAS 32.42 in conjunction with IAS 32.48), the positive and negative fair values of OTC derivatives that offset each other at currency level were netted for OTC derivatives concluded with the same central counterparty (CCP).
– Assets subject to the requirement of measurement at fair value through profit or loss with the exception of held-for-trading portfolios:
  In accordance with the specifications, both shareholdings and assets that are neither allocated to the "Hold-to-maturity" nor to the "Held-for-sale" business model are generally subject to measurement at fair value through profit or loss. HVB Group did not exercise the option of measuring shareholdings at fair value without affecting profit or loss. As all assets measured at fair value through profit or loss are also managed on a fair value basis, any allocation of assets that do not meet cash flow criteria to the "Hold-to-maturity" business model is ruled out. These are to be allocated to the "Other" business model and are consequently subject to the requirement of measurement at fair value through profit or loss.

Accounting and Valuation (Continued)

– HVB Group does not exercise the option to designate financial assets pursuant to IFRS 9.4.1.5 as measured at fair value through profit or loss.
– HVB Group only uses the fair value option for certain financial liabilities designated as "at fair value through profit or loss" upon initial recognition. Financial instruments are designated on the basis of the fair value-based management of the portfolios concerned.

Financial assets and liabilities at fair value through profit or loss are disclosed upon initial recognition at their fair value without any transaction costs.

Consequently, held-for-trading portfolios, assets subject to the requirement of measurement at fair value through profit or loss and liabilities allocated to the fair value option are measured at fair value. Changes in value are recognised in the income statement.

Assets measured at fair value without affecting profit or loss
Certain securities holdings that are either held to maturity or can be sold have been allocated to the "Held-for-sale" business model. As these securities also meet cash flow criteria, the conditions for measurement at fair value without affecting profit or loss have been met. These holdings are reported under the balance sheet item named "Financial assets at FVTOCI".

Loans and receivables measured at cost
In the lending business, HVB Group focuses on customer care and customer relationships so the intention is generally to hold extended loans to maturity. If, in exceptional cases, there is no intention to hold loan receivables to maturity at the time of their addition, these are allocated to the "Other" business model. Provided the loans also meet cash flow criteria, these are allocated to the "Hold-to-maturity" business model and measured at amortised cost. In addition, securities holdings that meet cash flow criteria and are intended to be held to maturity are also measured at amortised cost. Premiums and discounts are taken to the income statement under net interest over the term of the underlying items. This is done using the effective interest method. These assets are disclosed upon initial recognition at their fair value including any transaction costs.

As the intention is generally to hold to maturity, debt instruments allocated to the "Hold-to-maturity" business model may be sold only in the following exceptional cases:
– sales occur infrequently or irregularly even if they are of significant value in this case,
– sales, if they occur frequently, are individually or in the aggregate of insignificant value,
– sales occur just before the final maturity date and the sales proceeds equal the outstanding contractual payments for the most part or
– sales are made as a result of an increase in the credit default risk.

Depending on the allocation of the debtor, the loans and receivables measured at cost are reported under the balance sheet item "Loans and receivables with banks (at cost)" or "Loans and receivables with customers (at cost)".

HVB Group did not exercise the option of designating an asset to be measured at fair value through profit or loss. The Bank also waived measuring credit exposures at fair value through profit or loss.

IBOR reform: Modification of financial instruments in the course of the IBOR transition

On account of the IBOR reform, changes may occur in the contractual cash flows of a financial instrument in the following ways:

– Change from an existing interest rate benchmark to an alternative benchmark rate under a contractual agreement or an already existing fallback clause in an agreement with spreads that can be agreed to offset a basis difference between the interest rate benchmarks, or
– Adjustment in the method used to calculate an unchanged designated interest rate benchmark (e.g. EURIBOR)

These adjustments to agreements on contractual cash flows do not result in any significant modification of the instrument which means that derecognition is not necessary. Instead, the changes in interest rate benchmarks in the context of the IBOR reform constitute an adjustment in variable interest rates, which must be accounted for by a prospective adjustment in the effective interest rate pursuant to IFRS 9.B5.4.5. If the financial instruments concerned are to be accounted for at fair value, the changes made in the interest rate benchmarks must be taken into account in the fair value measurement.
If compensation payments were made for derivatives in the course of the change in interest rate benchmarks, these were recognised in the fair value measurement of the derivatives through profit or loss.

Determination of fair value

We can normally reliably determine the fair value of financial instruments measured at fair value. IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (no forced liquidation or distress sale) between independent market participants at the measurement date. Thus, the fair value based on a notional transfer corresponds to a selling price or, in the case of a liability, the transfer price (exit price).

The fair value is determined using the same three-level fair value hierarchy under IFRS 13 as is applicable for the disclosures regarding the fair value hierarchy (Note “Fair value hierarchy”):

– Level 1: Financial instruments measured using (unadjusted) quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date
– Level 2: Assets or liabilities for which no price can be observed on an active market and whose valuation is derived from directly observable (prices) or indirectly observable (derived from prices) valuation parameters
– Level 3: Assets or liabilities for which the fair value cannot be measured exclusively on the basis of observable market data; but also on valuation parameters based on model assumptions (non-observable valuation parameters)

Suitable measurement adjustments are applied to the fair value determined in this way in order to reflect further factors affecting the fair value (such as the liquidity of the financial instrument or model risks when the fair value is determined using a valuation model). When determining these valuation adjustments, we have exercised the option permitted by IFRS 13 under certain circumstances to determine fair value on a portfolio basis.

The risk of a counterparty defaulting on derivatives is covered by credit valuation adjustments (CVAs). Funding valuation adjustments (FVAs) are also set up for derivatives that are not fully covered by relevant collateral.

The own credit spread is also included in the underlying valuation parameters for liabilities held for sale and liabilities designated at fair value through profit or loss.

Accounting and Valuation (Continued)

Further disclosures regarding fair values and the fair value hierarchy are given in the Note "Fair value hierarchy", and the Note "Fair values of financial instruments compliant with IFRS 7".

Financial guarantees
A financial guarantee is a contract that requires the issuer to reimburse the holder for a loss it incurs because a specific debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

Viewed overall, the fair value of a financial guarantee is zero when the contract is concluded because the value of the premium received will normally match the value of the guarantee obligation in standard market contracts. The guarantee premium is recognised on a pro-rata basis. The existence of an impairment is checked during the subsequent measurement.

Credit derivatives, and most notably standardised credit default swaps (CDS), are measured at fair value through profit or loss as they are considered derivatives held for trading and not financial guarantees.

Credit commitments
Credit commitments represent declarations made to the customer to extend loans, buy securities or provide guarantees and acceptances. If these have not yet been utilised, they are generally shown as contingent liabilities in the notes. Necessary impairments are recorded as provisions. An exception to this are credit commitments where the assets resulting from the drawdown are usually sold shortly after the loan has been extended. The latter are recognised at fair value through profit or loss.

Hedge accounting
The Bank exercised the option of continuing to apply the provisions of IAS 39 on Hedge Accounting.

Hedges between financial instruments are recognised almost exclusively in accordance with the forms of the fair value hedge described in IAS 39. In 2008 and 2009, HVB Group changed the previously applied macro cash flow hedge accounting to the fair value hedge similarly permitted by IAS 39 for interest rate risk at portfolio level in large areas of asset/liability interest rate risk management. This is described additionally below alongside the principles covering general fair value hedges.

Besides the portfolio fair value hedge, HVB Group has other micro fair value hedges for individual financial instruments as well as a cash flow hedge in which HVB Group designated a smaller portfolio of securities as a cash flow hedge in 2018. Furthermore, the amortisation of the cash flow hedge reserve for two cash flow hedges, which have since been terminated, will be carried out.

A micro fair value hedge is generally a hedge of the exposure to changes in the fair value of a recognised asset, liability or an unrecognised firm commitment – or an identified portion thereof – that is attributable to a particular risk and that might affect net income for the period. In this respect, a high level of effectiveness is required, with the changes in the fair value of the hedged item with regard to the hedged risk and hedging derivative compensating each other within a range of 80% to 125%. Under this method, the hedging instrument is measured at fair value through profit or loss. The carrying amounts of the hedged item are adjusted by the valuation results relating to the hedged risk in a way that affects the income statement.

At our Bank, we designated micro fair value hedges for interest rate risks. For fixed-interest European government bonds or bonds of issuers with a similar risk allocated to the “Held for sale” business model, the interest rate risk of which was hedged individually and completely with interest rate swaps, we set up a separate micro fair value hedge for each transaction.

We apply the fair value hedge accounting for a portfolio hedge of interest rate risk for the accounting treatment of interest rate risk in asset/liability interest rate risk management. Recognising a fair value hedge for a portfolio of interest-bearing financial assets and liabilities using interest rate derivatives makes it possible to largely reflect the standard bank risk management procedures for the hedging of fixed interest rate risks in the accounts.

Under this accounting treatment of hedges across several items, the changes in the value of the hedged amount of the hedged items attributable to the hedged risk are carried altogether as a separate asset or liability item and not as an adjustment to the carrying amount of individual items as is the case with micro hedges. The hedged amount of the hedged items is determined as part of interest rate risk management and cannot be directly allocated to individual assets or liabilities. Where the hedge conditions are met, the offsetting changes in value of the hedged amount of the hedged items and the hedging instruments (interest derivatives) are recognised directly in profit and loss. Hedge inefficiencies arising within the necessary hedge efficiency thresholds of 80% to 125% are recognised as profit or loss in net hedging income.

Furthermore, for economic reasons cross-currency interest rate swaps (CCIRS) have been used in the refinancing of loans denominated in foreign currency. The CCIRS exchange longer dated fixed-interest positions denominated in euros for variable-yield positions denominated in foreign currency. This serves to hedge the hedged item against interest rate risk as part of the portfolio fair value hedge accordingly.

The cash flow hedge reserve existing at the changeover date and the offsetting clean fair values (fair values excluding the related accrued interest) of the existing cash flow hedge derivatives are amortised over the remaining term in net interest. This means that the amortisation of the cash flow hedge reserve existing at the changeover date will have no overall impact on profit or loss in the future until they are fully amortised. The changes in value of the same hedged items and hedging derivatives, together with all new contracts arising after the changeover date, are treated in accordance with the new portfolio fair value hedge model.

Generally, a cash flow hedge is employed to hedge the risk arising from volatile cash flows resulting from a recognised asset, recognised liability or planned transaction to be taken to the income statement. For example, derivatives are deployed in cash flow hedge accounting to hedge future streams of interest payments. In this context, payments arising from variable-interest assets and liabilities are swapped for fixed payments primarily using interest rate swaps. Hedging instruments are measured at fair value. The valuation result is divided into an effective and an ineffective portion. The effective portion of the hedging instruments is recognised in a separate item within shareholders’ equity (hedge reserve) without affecting reported profit or loss. The ineffective portion of the hedging derivatives is recognised directly in profit and loss. The hedged item is recognised at amortised cost.

HVB Group reported the hedging of the planned borrowing in advance through a forward interest rate swap in the form of a micro cash flow hedge for future transactions within the framework of the participation of our subsidiary at the time UniCredit Luxembourg S.A. in the TLTRO I and II of the European Central Bank (ECB). Upon receiving the borrowed funds from the ECB, this hedge was terminated. The cash flow hedge reserve existing on termination of the hedge and the offsetting equally high fair value of the interest rate swap are reversed periodically over the term of the hedged borrowings in the income statement. The borrowings effected and the interest rate swaps were included in the general portfolio fair value hedge for interest rate risks.

Accounting and Valuation (Continued)

9 Financial assets held for trading
This item includes securities held for trading purposes and positive fair values of traded derivatives. All other derivatives not classified as hedging derivatives (which are shown separately in the balance sheet) are similarly considered held for trading. Provided they are held for trading purposes, receivables from repurchase transactions, promissory notes, registered bonds and treasury bills are carried as other financial assets held for trading.

Financial assets held for trading purposes are carried at fair value. Gains and losses arising from the valuation and realisation of financial assets held for trading are taken to the income statement as gains less losses arising from trading securities.

With interest rate swaps, the two offsetting streams of interest payments are aggregated for each swap contract and reported in net terms as interest income or interest expense. In the case of pure derivatives trading portfolios, we report the netted interest payments under net trading income.

10 Financial assets at FVTPL
The item "Financial assets at FVTPL" reflects the new measurement category introduced by IFRS 9 and contains all the assets subject to the IFRS requirement of measurement at fair value with the exception of the held-for-trading portfolios. This item thus contains all the debt instruments subject to measurement at fair value through profit or loss based on the "Other" business model as well as the shareholdings also subject to measurement at fair value through profit or loss. This includes debt instruments to be held to maturity that do not meet cash flow criteria and are thus managed on a fair value basis in line with the Bank's specifications.

The majority of debt instruments are hedged against interest rate risks with interest rate swaps. The changes in fair value of the assets and hedging derivatives are reported in the item "Net gains/losses on financial assets and liabilities at fair value" in the income statement. Current interest income from debt instruments is recorded as interest income and profit distributions from shareholdings in the item "Dividends and other income from equity investments".

11 Financial assets at FVTOCI
The balance sheet item "Financial assets at FVTOCI" reflects the new measurement category introduced by IFRS 9. This item contains all the assets measured at fair value through other comprehensive income on the basis of the "Held-for-sale" business model and the fulfilled cash flow criteria.

This item only contains interest-bearing assets that are deferred at the effective interest rate. Upon addition, they are posted at their fair value including transaction costs (acquisition cost). Current interest income is recorded under the item "Interest income" in the income statement. Impairments are recorded through profit or loss in the income statement. The difference between the amortised cost calculated in this way and the fair value of the assets is entered directly in equity in the FVTOCI reserve, whereby the changes are recognised or derecognised through other comprehensive income. A gain or loss on disposal (repayment/sale) is shown under the item "Net gains/losses on financial assets and liabilities at fair value".

12 Loans and receivables
Debt instruments allocated to the "Hold-to-maturity" business model are shown under the balance sheet items "Loans and receivables with banks (at cost)" and "Loans and receivables with customers (at cost)". Assets allocated to a business model other than to the "Hold-to-maturity" business model are not included in the balance sheet items "Loans and receivables with banks (at cost)" and "Loans and receivables with customers (at cost)". In addition to loans and receivables from the lending business, these include securities allocated to the "Hold-to-maturity" business model. All the instruments allocated to the "Hold-to-maturity" business model meet the cash flow criteria and are carried at amortised cost, provided they are not hedged items of a recognised micro fair value hedge. The amount shown in the balance sheet has been adjusted for allowances for losses on loans and receivables.

13 Impairment of financial assets

Upon the introduction of IFRS 9, the method used to determine impairment losses was switched to the expected credit loss model. According to the criteria of IFRS 9, impairment losses have to be recognised for debt instruments that are measured at amortised cost or, alternatively, at fair value through equity. Furthermore, the rules applicable for determining an impairment are also to be applied to loan commitments or financial guarantee contracts that are not measured at fair value through profit or loss.

For the presentation of the measurement and management of credit risk, we refer to the statements made on credit risk in the Risk Report of this Management's Discussion and Analysis.

In the case of loans and receivables measured at cost, the impairment losses determined are posted to an impairment account and reduce the carrying amount; in the case of assets measured at fair value through equity, the impairment losses are determined in relation to the asset and, as a consequence of measurement at fair value, are recognised in the statement of total comprehensive income, whereas a provision is recognised for impairment losses on loan commitments and financial guarantee contracts.

HVB Group has not exercised the option of using the simplified approach pursuant to IFRS 9.5.5.15 for determining impairment losses on trade receivables, contract assets and lease receivables.

The method of calculating impairment losses is based on two pillars:
– the allocation of the asset to a stage
– the calculation of the expected loss associated with the asset

In the process of determining the expected credit losses, not only reliable information on past events is taken into account but also the current conditions and forecasts of future economic parameters. The regulatory procedures for the determination of the probability of default (PD), loss given default (LGD) and exposure at default (EAD) represent the starting point in this connection. These are then adjusted to meet IFRS 9 requirements. The main adjustments are as follows:
– Conservative elements, which are owed purely to regulatory requirements, were removed.
– Parameters were adjusted in order to move from a regulatory calculation based on long-term averages ("through the cycle") to a more cut-off date approach ("point-in-time") which takes greater account of the current macroeconomic situation.
– In addition, forward-looking information on the macroeconomic development is taken into account in the parameters.
– The credit risk parameters were adjusted to the multi-year horizon required in Stage 2.

The following adjustments were made to the individual parameters:
– To determine a multi-year probability of default, which covers the lifetime of a financial instrument, PD curves based on long-term averages and calculated based on the default rates of the corresponding portfolios are determined as a first step. These PD curves are then adjusted to a more reference-date perspective using statistical methods and adjustments are made to integrate macroeconomic forecasts over the next three years.
– To calculate a multi-year probability of loss, the LGD used for regulatory purposes are adjusted for conservative elements, which are purely owing to regulatory requirements. Furthermore, a check is conducted to determine whether it is necessary to adjust the figures calculated based on long-term averages to current conditions and, where required, they are adjusted. In addition, the recovery rate is adjusted for the next three years on the basis of a macroeconomic forecast. For material collateral, macroeconomic forecasts are included in the market value forecast. Downturn adjustments required for regulatory purposes are not used. Nor are any internal costs of the Bank added to the loss ratio in the course of treating defaulting exposures.
– To determine the multi-year exposure at default (EAD), the parameters used by the regulatory authorities are adjusted for conservative elements arising purely from regulatory requirements. A parameter used from a regulatory perspective which covers drawdowns in excess of the existing credit line is not used under IFRS 9. An additional parameter was also introduced which reflects the expectations on average drawdowns of existing lines from the second year. Furthermore, a parameter representing an expected term for loans without a fixed term is modelled which decisively determines the term over which an expected loss is calculated in Stage 2. For loans with existing repayment schedules, expected repayments are taken into account in determining the multi-year EAD.

Accounting and Valuation (Continued)

The process for incorporating macroeconomic scenarios into estimates is consistent with other forecasting processes in risk management (e.g. as part of the EBA stress tests and the ICAAP framework) and benefits from UniCredit's independent research department.

Three macroeconomic developments to be expected in the future are identified. In addition to the probable scenario (baseline), a positive scenario and an adverse scenario are also estimated. The baseline scenario represents the central scenario and is considered to be the most likely to occur. The positive and the adverse scenarios represent other possible occurrences, each depicting better or worse economic developments in the countries relevant for the Bank compared to the baseline scenario. The individual scenarios are assigned probabilities of occurrence.

– The baseline scenario reflects the developments anticipated by HVB Group. The baseline scenario takes into account a high number of COVID-19 infections and restrictions in mobility and business activities throughout Europe and to a lesser extent in the USA at the turn of the year leading to a decline in production. However, strong support from fiscal policy mitigates the impact on jobs and incomes, while the ECB and the Fed continue their current monetary policy of low interest rates, thus maintaining favourable financial conditions. Economic growth recovers in the spring of 2021 as milder weather allows governments to ease some of the restrictions, while the distribution of effective vaccines and new treatments to suppress virus transmission boosts confidence and activities from mid-2021. As public health improves and confidence returns, households spend a part of the savings accumulated during the crisis which increases consumer spending. Overall, the major economies are expected to be on track for solid growth in 2021. However, the free capacity available as a result of the contraction caused by the pandemic in 2020 dampens inflationary pressures throughout the forecast horizon and remains well below the targets of central banks, keeping monetary policy very accommodating. The Fed and the ECB are unlikely to change key interest rates until 2023 and probably beyond. The Pandemic Emergency Purchase Programme (PEPP) and TLTRO with very favourable conditions is likely to be continued in the eurozone until well into 2022. In detail, annual real growth in the gross domestic product is forecast for the eurozone at plus 5.0% in 2021, plus 2.7% in 2022 and plus 2.2% in 2023 (for Germany plus 4.8%, plus 2.7% and plus 2.2%).
– In the positive scenario the expected introduction of vaccines (together with new medical treatment) significantly bolsters confidence and thus leads to a sharper increase in GDP above the forecast horizon than we project in the baseline scenario. While the picture for 2021 is line with the baseline projections, the pace of recovery is seen to accelerate considerably in 2022 as households continue to reduce precautionary savings and companies take up their deferred investment plans. On account of the pent-up demand, GDP returns to the level it was at before the pandemic by the end of 2022. Governments gradually reduce their support measures and monetary policy has to remain less expansive. Key interest rates continue to remain stable in the USA and in the eurozone until 2023. In detail, annual real growth in the gross domestic product for the eurozone would be plus 5.0% in 2021, then increase to plus 6.0% in 2022 and amount to plus 2.5% in 2023 (for Germany plus 5.8% in 2021, plus 6.0% in 2022 and plus 2.7% in 2023).
– In this adverse scenario Europe is exposed to another pandemic wave at the beginning of 2021 while the USA continues to struggle with a persistently high number of infections that forces the new US government to severely restrict mobility and business activities. Some of the containment measures are eased again as the weather becomes milder. However, the introduction of vaccines is slower than assumed in the baseline scenario, firstly due to bottlenecks in the process and later because a relatively large proportion of the population is unwilling to be vaccinated. Therefore, herd immunity is achieved only towards the end of the three-year forecast horizon. In view of these assumptions, the COVID-19 crisis dampens private demand more strongly than assumed in the baseline scenario. Governments drive forward their policy of expansion in order to mitigate the effects of the COVID-19 pandemic and maintain social stability. The ECB is expected to actively continue with PEPP and TLTRO and generous conditions until 2023. This allows generally favourable financial conditions to be maintained despite a further build-up of debt in the public and private sectors. In detail, annual real growth in the gross domestic product for the eurozone would be plus 1.5% in 2021, then increase to plus 3.0% in 2022 and amount to plus 2.1% in 2023 (for Germany plus 1.2% in 2021, plus 2.6% in 2022 and plus 1.9% in 2023).

Models from the Group's central stress test area are used to adjust the "probability of default" and "loss ratio" parameters in order to calculate the expected loss. These model the relationship between macroeconomic development and the resulting development of PDs and LGDs. The parameters are adjusted on the basis of the baseline scenario by the respective differences determined for the three forecast years.

Moreover, the expected loss is adjusted with a factor that compensates for the partial non-linearity that might be included in the correlation between macroeconomic changes and the change in the expected loss. This means that an adjustment factor is calculated from the three scenarios, taking account of their weighting, which is applied directly to the expected loss.

As described above, forward-looking information on macroeconomic development is taken into account in the parameters in accordance with the IFRS 9 standard. It became apparent particularly during the COVID 19 pandemic that

– unpredictable lockdowns and different approaches to easing these can occur; which have different effects depending on the industry,
– an inconsistent approach might occur at national and international level and
– individual government support measures and incentives might be put in place that should be taken into account in the models but are not included in historical data.

In the reporting year, industry-specific elements were thus added to the existing macroeconomic models so that the forecast models can now cover asymmetrical shocks at a detailed level.

At the end of 2020 and at the beginning of 2021, further uncertainty became evident from two perspectives due to the strict lockdown in Germany as a result of pandemic developments. Firstly, the duration and the impact of the lockdown is not known and secondly, this exacerbates the incompleteness of the information available on the economic situation. In the underlying risk parameters, for example, the balance sheet information only becomes effective with a time lag following the publication of customers' balance sheets. For this reason, customers with a specific industry and rating combination were identified at Stage 1 and migrated to Stage 2. The related increase in loan-loss provisions takes account of the significant increase in credit risk (SICR).

Furthermore, the main PD and LGD rating models were recalibrated and the time series extended in the reporting year. The average probability of default (central tendency) in the PD models also takes account of the 90-day payment default criteria for Germany slightly adapted by the EBA. The cure rate in the LGD was adapted to reflect the new definition of payment default. Regular recalibrations of the risk parameters are also to be found in the determination of the LLP. In order to adequately apply the forward-looking information for 2021 – 2023, the 2020 default rates were extrapolated on the basis of the first nine months in 2020 already passed.

The HVB Group units responsible for the restructuring or workout of non-performing exposures determine the future incoming payments for non-performing exposures which are significant in terms of amount based on the circumstances in each case. Consequently, specific allowances are recognised for these exposures while a collective allowance is recognised on a parameter basis for non-performing exposures which are insignificant in terms of amount in line with the method used in determining the expected credit losses.

The following applies to the allocation to stages:
– Stage 1 contains newly issued credit balances, financial instruments for which there has been no significant deterioration in the creditworthiness since they were first issued and securities with a low credit risk (low credit risk exemption).
– Stage 2 contains financial instruments which, although not yet in default, have undergone a significant deterioration in terms of their creditworthiness since they were first issued.
– Stage 3 contains financial instruments in default.

In the notes to the respective balance sheet items, the tables on changes in gross carrying amounts and in impairments include information on the transfers between the respective stages for 2020 for the first time. The table on changes in impairments shows as a transfer from one stage to another due to the change in credit quality the reversals of the impairments upon disposal in the original stage and the addition to the impairments in the new stage.

An impairment loss is generally recognised at the amount of the expected 12-month credit loss for a financial instrument upon initial recognition (Stage 1). Financial assets already impaired upon initial recognition are an exception to this rule as, in these cases, the expected credit losses have already been taken into account in the fair value at which such an asset is posted.

Accounting and Valuation (Continued)

If the credit default risk has increased significantly since initial recognition, an impairment loss must be recognised in the amount of the (residual) loss expected over the term to maturity (Stage 2). To determine when a significant increase in the credit default risk has occurred, HVB Group uses an internal model that takes account of both relative and absolute changes in the credit default risk. Key factors in this context are:
– a comparison of PD upon initial recognition and at the reporting date at the level of each individual transaction whereby trigger levels to be exceeded for a significant increase are defined that take account of material elements for determining an expected change in the credit default risk such as maturity, age, PD level upon initial recognition,
– absolute thresholds like the "backstops" required by the standard, such as arrears of 30 days or more,
– further internal attributes such as renegotiations of financial instruments on account of financial difficulties (forbearance measure).

If the credit default risk is no longer significantly higher on the reporting date, the asset is transferred back to Stage 1.

A statistical model for quantile regression was introduced to implement the quantitative component for the allocation to a stage. This defines a threshold that determines the maximum change between the probability of default upon addition of the financial instrument and the current reference date. An important part of this model is defining the quantile that determines the expectation concerning the share of instruments in Stage 2 in long-term funds. As the consideration of individual influencing factors differs (such as rating upon issuance, age), the quantiles also vary depending on the portfolio. Essentially, the historical default rate of the portfolio concerned is used as a basis to determine the quantile and is supported by further absolute criteria on stage allocation, such as the share of instruments with 30 days default.

The actual share of financial instruments in Stage 2 varies by the long-term average of the quantile, depending on the current macroeconomic situation and expectations of developments in the economic cycle.

HVB Group has exercised the option for securities pursuant to IFRS 9.5.5.10 according to which it can be assumed in the case of debt instruments with a low credit default risk that no significant increase in the credit default risk has occurred. Securities of this kind with an investment grade rating are generally allocated to Stage 1.

If the borrower of a debt instrument has defaulted, such credit impaired assets are allocated to Stage 3. For these assets, interest income is recognised only in the amount of the interest on the basis of the net carrying amount. Like in the past, default is when a material liability of the borrower is overdue by more than 90 days or HVB Group believes the borrower is unable to meet his payment obligations in full without steps to realise collateral being taken. This presupposes that there is objective evidence that the financial asset is impaired. Objective evidence of impairment refers to events that normally lead to an actual impairment. In the case of debt instruments, these are events that could result in the borrower not being able to settle his obligations in full or at the agreed date. Objective evidence is provided only by events that have already occurred, not by events expected in the future. The assessment of the borrower's creditworthiness using internal rating processes is relevant in this connection. This assessment is reviewed periodically and when negative events occur. If the borrower is 90 days in arrears, this is considered objective evidence of an impairment, similarly leading promptly to a review of the borrower's individual rating on account of the occurrence of a negative event involving the borrower. Based on internal procedures, the classification of the borrower is updated to "in default" or "not in default". As a result, the assessment of the borrower's creditworthiness is always assessed with regard to his ability to meet outstanding liabilities.

In Stage 3, the impairment is calculated as the difference between the carrying amount and the present value of the expected future cash flow. These figures are estimated by HVB Group and discounted using the corresponding interest rate. In doing so, different, realistic scenarios are estimated whereby the impairment loss is obtained from the expected value of the credit defaults weighted by the probability of occurrence for each scenario. The impairment loss calculated in this way likewise corresponds to the expected credit losses for the debt instrument but, deviating from Stage 1 and Stage 2, the probability of default is no longer taken into account as default has already occurred.

As the debt instrument is in default, it is put on a non-accrual basis, i.e. the contractual interest payments are no longer recognised in the income statement. Instead, the interest income is determined on the basis of the net carrying amount. For this purpose, the net carrying amount from the previous period is compounded at the original interest rate of the debt instrument over the reporting period and the impairment loss, which is calculated as the difference between the present value of the expected cash flow (net carrying amount) and the gross carrying amount, is recognised in interest income at the compounded amount in the income statement. Furthermore, the amounts put on a non-accrual basis are recorded both in the gross carrying amount and in the impairment losses without affecting income. As, in doing so, the gross carrying amount and the impairment losses are increased by the same amount, the net carrying amount does not change.

As soon as the reasons for the default no longer apply, the assets are transferred back to Stage 1 or 2, respectively, depending on whether the credit default risk is still significantly higher or not in comparison to when the assets were first acquired.

In the case of financial guarantees and irrevocable credit commitments made to a borrower in default, a possible impairment is determined in the same way; the impairment loss is recognised as a provision.

If a receivable is considered uncollectible, the amount concerned is written off, which leads to the derecognition of the receivable. The amount is derecognised if the receivable in question is due, any available collateral has been realised and further attempts to collect the receivable have failed. Acute country-specific transfer risks are taken into account in the process.

For financial assets that were already in default upon initial recognition (purchased or originated credit impaired assets – POCI), the interest income is likewise recognised only at the amount of interest based on the net carrying amount. Only those new additions are recognised as POCI assets that result in more than only an insignificant increase in the existing exposure, i.e. exceed 20% of the existing net exposure (exposure after deduction of recoverable collateral). Credit losses expected upon initial recognition are already taken into consideration in the fair value when posting assets so that no impairment is recorded for POCI assets upon initial recognition. With regard to subsequent measurement, these assets are measured on the basis of the loss anticipated over the (residual) term to maturity; in the case of higher expected inflows than assumed upon initial recognition, however, the assets can be written up to amounts in excess of the acquisition cost.

Modification of financial assets measured at amortised cost

If the contractual terms of financial assets are modified, it is necessary to review whether such modifications are significant or insignificant. Whereas significant modifications result in the derecognition of the existing asset and the posting of a new, significantly modified asset, in the case of insignificant modifications, only the agreed modifications to the contractual cash flows are discounted and the difference between the present value of the modified contractual payments determined in this way and the carrying amount (present value of the contractual payments before modification) are recognised in the income statement.

A significant modification to the contractual terms has occurred where compliance with cash flow conditions has changed or where conditions have been adjusted to general market terms without this adjustment being seen as a concession made to the borrower based on the borrower's credit rating. In such cases, the existing loan is derecognised and the modified loan posted as a newly extended loan.

In addition, lending agreements can be modified to ease the burden on borrowers in poor financial situations and improve the probability of the loans being serviced (forbearance). Various strategies may be used to ease the burden on the borrower. Possible measures include deferrals and temporary moratoriums, longer periods allowed for repayment, reduced interest rates and rescheduling, and even debt forgiveness.

Accounting and Valuation (Continued)

Where the Bank waives payments by the borrower (such as waived fees, reduction of contractual interest rates, etc.) due to a deterioration in creditworthiness, such a waiver represents objective evidence of the borrower defaulting. The derecognition of payments due or of future repayments caused by an issued waiver is recognised in the income statement as an impairment, provided an allowance had not already been set up for this in the past or recognition was waived on account of the borrower defaulting (such as putting a loan on an internal non-accrual basis).

If the modification of the agreement does not give rise to derecognition of the receivable or part of the receivable on account of the waiver of payments due or of future repayments but merely to an adjustment of future cash flows, for example through a prospective reduction in the interest rate as of the date of the modification, the gross carrying amount has to be adjusted accordingly. For this purpose, the newly agreed cash flows have to be discounted at the original effective interest rate and this present value deducted from the gross carrying amount (prior to the modification to the agreement).
The difference determined in this way is recorded as modification gain or loss through the income statement. As this primarily affects non-performing, impaired receivables, the modification gain or loss is reported under the income statement item "Credit impairment losses IFRS 9".

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

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

15 Property, plant and equipment

Property, plant and equipment includes land and buildings used by HVB Group itself, fixtures in buildings not owned, plant and office equipment, right-of-use assets (leases) and other property, plant and equipment.

With the exception of owner-occupied land and buildings, which are accounted for using the revaluation model with effect from 31 December 2019 (see the detailed presentation on the revaluation method below), property, plant and equipment is measured using the cost model at acquisition or production cost less depreciation– insofar as the assets are depreciable – which are reduced by scheduled straight-line depreciation based on the assets' useful lives. For the wind farm, the residual carrying amount was distributed over the expected residual useful life based on the prorated consumption of value of the economic benefit potential. The wind farm was classified as "Non-current assets or disposal groups held for sale" as of 30 June 2019 and sold shortly before the end of 2019. Fixtures in rented buildings are depreciated over the term of the rental contract, taking into account any extension options, if this is shorter than the normal useful life of the asset concerned. The right-of-use assets from leases reported under property, plant and equipment are subject to scheduled depreciation on a straight-line basis over the shorter of the useful life of the leased asset or the term of the lease agreement based on the cost model. While HVB Group now measures its owner-occupied land and buildings using the revaluation model, it has decided not to apply this valuation model to the right-of-use assets relating to these asset classes. The valuation of the right-of-use assets from leases recognised under property, plant and equipment is described in detail in the Note "Lease operations".

PROPERTY, PLANT AND EQUIPMENT	ECONOMIC LIFE
Buildings	25–60 years
Fixtures in buildings not owned	10–25 years
Plant and office equipment	3–25 years
Other property, plant and equipment	
Wind farm	28 years
Other property, plant and equipment	10–20 years

The estimated useful lives of property, plant and equipment are reviewed once a year and adjusted as appropriate should the expectations differ from earlier estimates.

Unscheduled impairments are taken in accordance with IAS 36 on property, plant and equipment whose value is impaired. An asset is considered impaired when its carrying amount exceeds its recoverable amount. The recoverable amount is normally determined on the basis of the value in use. Should the reasons for the unscheduled impairment no longer apply, a subsequent write-up is taken to the income statement; the amount of this subsequent write-up must not increase the value of the property, plant and equipment to a level in excess of the amortised acquisition or production cost.

Scheduled and unscheduled depreciation and write-ups on items of property, plant and equipment are recognised in the consolidated income statement under "Amortisation, depreciation and impairment losses on intangible and tangible assets" within operating costs.

Subsequent expenditure relating to an item of property, plant and equipment is capitalised, provided additional future economic benefits will flow to the Bank. Expenditure on repairs or maintenance of property, plant and equipment is recognised as expense in the year in which it is incurred.

Government grants for items of property, plant and equipment (IAS 20.24) are deducted from the acquisition or production cost of the underlying assets on the assets side of the balance sheet.

With effect from 31 December 2019, the accounting method for the land and buildings occupied by the Bank that fall within the scope of IAS 16 and are reported under property, plant and equipment, was changed from the previous measurement at cost to the revaluation model in accordance with IAS 16.31. Consequently, the owner-occupied land and buildings were still measured at amortised acquisition or production cost for the period up to and including 31 December 2019 (see the explanation of the cost model above). Based on the carrying amounts thus determined, a revaluation was carried out in the course of the initial revaluation as at 31 December 2019, which resulted in an adjustment of the carrying amounts of the owner-occupied land and buildings to the fair value as at the revaluation date. The resulting effects on the consolidated financial statements of HVB Group at year-end 2019 were described in detail in the Note "Consistency" in the notes to the consolidated financial statements of the 2019 Annual Report of HVB Group. Since the change in the accounting method was made prospectively in accordance with IAS 8.17 in conjunction with IAS 16.80A, the owner-occupied land and buildings are subsequently measured based on the revaluation model in the 2020 financial year for the first time. The related accounting changes are presented in detail below.

Instead of the previous measurement at amortised acquisition or production cost, owner-occupied land and buildings will be accounted for from now on at a revalued amount upon subsequent measurement, which will generally be the fair value at the date of revaluation less any subsequent accumulated scheduled depreciation and impairment losses. Regular revaluations will be carried out to ensure that the carrying amount calculated in this way does not deviate significantly from the fair value.

A prerequisite for the application of the revaluation model is that the fair value can be reliably determined. According to the definition in IAS 16.6, the fair value of property, plant and equipment is the price that would be received for the sale of an asset or paid for the transfer of a debt in an orderly transaction between market participants at the measurement date. The fair value is determined in accordance with the provisions of IFRS 13.

The carrying amounts for owner-occupied property were divided into separate carrying amounts for land on the one hand and buildings on the other, which are measured separately as classes of property, plant and equipment. For the revaluation of properties used by the Bank, valuation reports are generally prepared by independent external experts. HVB Group carries out the valuation itself only for non-essential properties. Revaluations are made with sufficient regularity to ensure that the carrying amount of a revalued asset does not differ materially from its fair value.

Accounting and Valuation (Continued)

The revalued amount (fair value) determined for the land or buildings at the revaluation date is the new carrying amount. The difference to the previous carrying amount of the asset is recognised as follows, taking account of previous periods:

– If the fair value is higher than the carrying amount due to an increase in value, the difference is generally to be reported in the consolidated statement of total comprehensive income under other comprehensive income (OCI) and accumulated in equity as a revaluation surplus without affecting profit or loss. However, if a revaluation loss was recognised as an expense in the consolidated income statement in previous periods, in exceptional cases a write-up up to the amortised acquisition or production cost must be recognised in the income statement in the event of a new increase in value. All increases in value beyond this are to be recognised in other comprehensive income and thus increase the revaluation surplus in equity. Consequently, a revaluation gain in excess of amortised acquisition or production cost is never recognised in profit or loss.
– By contrast, if the fair value is lower than the carrying amount due to a decrease in value, the carrying amount must be written down to the lower fair value. If a revaluation surplus exists for the asset concerned as a result of revaluation gains in previous periods, it is reversed by recognising the impairment loss in other comprehensive income in the event of a new revaluation loss. Any revaluation loss beyond this is recognised in profit or loss.

Revaluation effects recognised directly in equity are reported in the consolidated statement of comprehensive income under the item "Allocation to/withdrawal from the revaluation surplus for owner-occupied property (IAS16)" as components of the income and expense items recognised in other comprehensive income that will not be reclassified to the consolidated income statement in future periods (no recycling). The revaluation surplus is recognised under the item "Revaluation surplus for owner-occupied property" as a component of other reserves in equity in the consolidated balance sheet and reported separately in the statement of changes in consolidated shareholders' equity.

After revaluation, buildings subject to wear and tear are depreciated on a straight-line basis over their expected useful lives in accordance with the subsequent measurement method applicable to other tangible assets. The revalued amount constitutes the new basis of measurement for depreciation. At HVB Group, the initial revaluation of land and buildings used by the Bank at 31 December 2019 resulted in an increase in the volume of depreciation, which leads to comparatively higher depreciation expenses in subsequent periods. Depreciation on revalued buildings is recognised in the consolidated income statement. Scheduled depreciation is not taken on land as it is a non-depreciable asset.

The difference between depreciation based on the carrying amount revalued at fair value and depreciation based on the amortised acquisition or production costs is transferred each year within equity from the revaluation surplus to retained earnings. Any revaluation surplus thus corresponds to the difference between the fair value and the amortised acquisition or production costs.

Scheduled and unscheduled depreciation and write-downs as well as write-ups recognised in the consolidated income statement are generally reported in the item "Amortisation, depreciation and impairment losses on intangible and tangible assets" within operating costs.

HVB Group adjusts the reported acquisition costs and the accumulated depreciation accrued up to the revaluation date in the statement of changes in non-current assets in proportion to the change in the carrying amount, so that the (net) carrying amount reflects the fair value (restatement approach). For example, if a revaluation increases the carrying amount by 10% to the fair value determined at the revaluation date, both the acquisition costs and the accumulated depreciation are increased by this factor (10%) in the statement of changes in non-current assets.

The carrying amount of land or a building is derecognised on disposal or when no future economic benefits are expected from its use or disposal. In the event of the sale of revalued land or a revalued building, the revaluation excess recognised in and allocable to the revaluation surplus is transferred in full to equity in retained earnings.

Excluded from the application of the revaluation model are owner-occupied properties that are in the process of being sold and are recognised as "Non-current assets or disposal groups held for sale"; the measurement requirements of IFRS 5 must be applied to these properties. However, the property must be revalued for the last time at the time of reclassification if the carrying amount differs from the fair value at that time.

16 Lease operations

IFRS 16 rules govern the accounting of lease operations. These rules apply to leases of our property, plant and equipment and to our investment properties. IFRS 16 does not apply to leases involving licence agreements.

In the case of new agreements concluded, HVB Group assesses at the inception of the agreement whether the agreement constitutes or contains a lease. This is the case when the agreement gives the right to control the use of an identified asset (of the underlying asset) for a specified period of time in return for a fee. HVB Group assesses whether the definition of a lease and the related guidelines in IFRS 16 are met primarily on the basis of the following criteria:

– the agreement contains an identified asset which is either explicitly specified in the agreement or implicitly specified by the fact that the asset is made available for use by HVB Group at a certain point in time;
– HVB Group is essentially entitled to derive all the economic benefits associated with the use of the identified asset throughout the period of use, taking into account the rights set out in the agreement;
– HVB Group is entitled to decide on the use of the identified asset throughout the period of use. This is particularly the case if HVB Group has the right to determine how and for what purpose the asset is used.

Furthermore, it is only necessary to reassess whether an agreement constitutes or contains a lease if the terms of the agreement change.

HVB Group as lessee

In the case of agreements which constitute or contain a lease, HVB Group as the lessee generally recognises as an individual lease each lease component separately from the non-lease components of the agreement. In doing so, the contractually agreed consideration is allocated to the individual contractual components on the basis of the relative individual selling prices. HVB Group does not make use of the practical facilitation option, according to which a lessee can decide for individual classes of underlying assets not to separate the non-lease components and instead to account for lease and non-lease components as a single lease component.

Leases will be accounted for by the lessee using a uniform accounting model (right-of-use-approach). Under this model, HVB Group as the lessee generally recognises an asset for the right granted to use the underlying leased asset and a corresponding lease liability for the obligation to make the outstanding lease payments at the commencement date of the lease.

However, IFRS 16 provides lessees with the option of exempting short-term lease agreements with a term of up to twelve months and leases of low-value assets from recognition. HVB Group has elected to apply the simplified presentation option to all such leases and recognises the related lease payments on a straight-line basis over the term of the lease as an expense in the consolidated income statement.

The right-of-use assets recognised in the consolidated balance sheet are measured at cost upon addition. Such cost includes the present value of all future lease payments (the amount resulting from the initial measurement of the lease liability), plus payments made on or before the commencement date of the lease, initial direct costs and estimated costs of dismantling or restoring the underlying asset or the site where it is located (to the extent that such dismantling costs give rise to an obligation that is recognised and measured in accordance with IAS 37) less any lease incentives received.

Accounting and Valuation (Continued)

The right-of-use assets reported under property, plant and equipment are subsequently measured using the cost model. In accordance with the depreciation rules of IAS 16, the right-of-use assets are amortised on a straight-line basis over the shorter of the two useful life periods of the underlying asset and the term of the lease. If the lease payments to be taken into account also include the transfer of ownership of the leased asset at the end of the lease term, or if the cost of the right-of-use asset takes into account the fact that the lessee will exercise a purchase option, the write-downs of the right-of-use asset are made over the economic life of the underlying asset. Otherwise, the right-of-use asset is amortised over the term of the lease. Existing term and call options are taken into account if their exercise is deemed sufficiently certain. In addition, the right-of-use asset is continually tested for impairment in accordance with IAS 36, adjusted if necessary and adjusted for certain remeasurements of the lease liability. While HVB Group will in future value its land and buildings reported under property, plant and equipment in accordance with the revaluation model of IAS 16, it has decided not to apply this valuation model to the right-of-use assets relating to these investment classes.

In contrast, the fair value model is applied to right-of-use assets that meet the definition of investment properties in IAS 40 and are reported under investment properties, as this model is also used for the subsequent measurement of investment properties in HVB Group. Consequently, HVB Group measures the right-of-use asset it has to an investment property at fair value and not at the underlying value of the asset.

The initial measurement of the lease liability is based on the present value of the lease payments not yet made on the commencement date. Lease payments comprise fixed payments (including de facto fixed payments) variable lease payments linked to an index or (interest) rate applicable on the commencement date), the amounts expected to be paid under a residual value guarantee and the exercise price of a purchase option if the lessee is reasonably certain to exercise it. Penalties for premature termination of the lease are only included in the lease payments if the lessee is reasonably certain to terminate the lease prematurely. All lease incentives (e.g. rent-free periods) expected to be received are deducted from this.

Lease payments are discounted at the interest rate underlying the lease (interest rate implicit in the lease) if it can be readily determined. Otherwise they are discounted at the lessee's incremental borrowing rate. The latter is the interest rate that a lessee would have to pay to raise funds in a similar economic environment in order to obtain an asset of similar value at comparable conditions. In order to determine the incremental borrowing rate, HVB Group uses a fixed interest rate curve based on a swap rate (base rate) and the Bank's funding premium, which reflects the nature of the lease obligations. According to this method, the lease payments not yet made are discounted to the present value at current interest rates taking into account the internally determined funding premiums. The funding premiums correspond to the parameters that the Bank uses when setting the prices for its own borrowings. As a rule, we apply the incremental borrowing rate for discounting because the interest rate implicit in the lease is generally not available to us.

Variable lease payments that are not linked to an index or (interest) rate and are therefore not taken into account in the measurement of the lease liability are recognised by lessees as an expense in the period in which they arise.

In the course of the subsequent measurement, the lease liability is updated using the effective interest method from accounting mathematics. The carrying amount of the lease liability is compounded and reduced by the amount of the lease payments made with no effect on income.

The lease liability is remeasured if future lease payments change due to a change in the index or (interest) rate, if the estimate of the expected payments under a residual value guarantee is adjusted, if the estimate of the exercise of a purchase, extension or termination option changes or if the de facto fixed lease payment changes. Accordingly, the right-of-use asset is to be adjusted by the amount resulting from the revaluation of the lease liability. If the reduction in the lease liability exceeds the carrying amount of the right-of-use asset, the resulting residual amount (difference between amount of the reduction in the lease liability and the carrying amount of the right-of-use asset) is recognised in profit or loss.

Disclosure in the consolidated financial statements of HVG Group is as follows:
- In the consolidated balance sheet we report right-of-use assets that do not meet the definition of investment property under property, plant and equipment. In contrast, right-of-use assets that meet this definition are presented in the balance sheet as investment properties. Lease liabilities are presented in the balance-sheet item "Deposits from customers" or "Deposits from banks".
- In the consolidated income statement, scheduled and unscheduled amortisation and write-downs, as well as write-ups on the right-of-use assets contained in property, plant and equipment are generally recognised in the item "Amortisation, depreciation and impairment losses on intangible and tangible assets" within operating costs. A gain or loss arising from a change in the fair value of rights to use investment properties is recognised directly in the income statement in the item "Net other expenses/income". The accrued interest on the lease liabilities contained in the deposits from customers and deposits from banks is recognised under interest expense. Expenses in connection with short-term lease agreements, leases based on a low-value assets and variable lease payments not taken into account in the measurement of the lease liabilities are shown in the item "Other administrative expenses".

HVB Group acts as seller/lessee in sale-and-leaseback transactions in which it sells assets (properties) to another company (buyer/lessor) which it then leases back from that company. The provisions of IFRS 15 are applied in determining whether the transfer of the assets is to be accounted for as a sale. If the transfer of the asset as a result of the transfer of control constitutes a sale, the seller/lessor must recognise the right-of-use asset relating to the leaseback at that portion of the former carrying amount relating to the right-of-use asset retained by it. Accordingly, any gain or loss on the transaction is recognised only to the extent that it relates to the rights transferred to the buyer/lessor. The pro rata unrealised gain on the sale resulting from the adjustment of the initial measurement of the right-of-use asset is subsequently recognised as a reduction of the ongoing write-downs of the right-of-use asset over the term of the leaseback.

If the transaction is not carried out at fair value or at standard market conditions but, for example, a purchase price premium is compensated by higher lease payments, the differences are considered to be financing transactions. Accordingly, the acquisition cost of the right-of-use asset is reduced by these financing components in order to recognise the right-of-use asset and the income from the sale of the asset. However, if the transfer of the assets does not constitute a sale because control is not transferred, the transaction is presented in the balance sheet of the seller/lessee as a financing transaction. The seller/lessee continues to recognise the transferred assets and recognises the financial liability in the amount of the income from the transfer in accordance with IFRS 9.

HVB Group as lessor
In the case of agreements that constitute or contain a lease, HVB Group as a lessor reports as a lease each lease component separately from the non-lease components of the agreement and applies the respective regulations of IFRS 15 to the distribution of the contractually agreed compensation between the individual components.

Leases in which HVB Group appears as the lessor are classified as either finance or operating leases on commencement of the lease (dual lessor accounting model). If the terms of the lease essentially transfer all the risks and rewards incidental to ownership to the lessee, the lease is classified as a finance lease. All other leases are classified as operating leases. The classification is only reassessed in the event of a change in the lease agreement.

In the case of a sublease, HVB Group acts as an intermediate lessor and accounts for the principal lease and the sublease as two separate agreements. The classification of the sublease as a finance or operating lease is based on the right-of-use asset and not on the asset from the principal lease underlying the lease. If the principal lease is a short-term lease to which HVB Group applies the above described exemption, HVB Group classifies the sublease as an operating lease.

Accounting and Valuation (Continued)

– Operating leases
  In the case of operating leases, the lessor, as the beneficial owner, recognises the underlying asset in its consolidated balance sheet. The leased assets are carried under property, plant and equipment or investment properties and measured in accordance with the relevant methods. Lease income from operating leases is recognised on a straight-line basis over the term of the respective lease and shown under other operating income. Initial direct costs incurred in negotiating and agreeing a lease are added to the carrying amount of the leased asset and allocated on a straight-line basis over the term of the lease.
– Finance leases
  If the lessor transfers the underlying asset to the lessee for use under a finance lease, the lessor must derecognise it from its consolidated balance sheet on the commencement date and recognise a finance lease receivable from the lessee. The initial measurement of the finance lease receivable included in the item "Loans and receivables with customers (at cost)" or "Loans and receivables with banks (at cost)" is carried at the net investment in the lease using the lessor's interest rate underlying the lease. Initial direct costs are included in the initial measurement of the net investment in the lease and reduce the income recognised over the lease term. The lease payments to be included in the amount receivable under the lease generally correspond to the payments that must also be taken into account upon the initial measurement of a lessee's lease liability. Subsequently, the lease payments received by the lessee are divided into an interest portion recognised in the income statement and a redemption portion. Interest income is recognised over the term of the lease using the effective interest method; the redemption portion reduces the outstanding receivable as a repayment of the principal. Derecognition and impairment provisions of IFRS 9 are to be applied to the amounts receivable under the lease. If the estimated unguaranteed residual values are used in the calculation of the gross investment in the lease, the lessor shall periodically review these values.

Variable lease payments are recognised as income by the lessor in the period in which they arise.

For more information, please refer to the Note "Information regarding lease operations".

17 Investment properties
Investment properties are real estate (land and buildings) that HVB Group holds to earn rental income and/or for capital appreciation over the long term.

Our investment properties are recognised at acquisition or production cost including transaction costs at the time of addition. We then measure our investment properties using the fair value model in accordance with IAS 40.33. This also applies to the right-of-use assets under leases that comply with the definition of investment property in IAS 40 and are classified as investment property. There is no scheduled depreciation over the economic life. Gains and losses resulting from changes in the fair value are recognised through profit or loss in the consolidated income statement under the item "Net other expenses/income" in the period in which they arise. Current expenses and rental income for land and buildings held as an investment is also reported in this item.

The fair value of investment properties is determined as follows: the properties to be measured are always unique, so that there are no prices that are observable for these properties. Consequently, fair value is to be determined on the basis of recognised valuation methods (Level 3). Only in exceptional cases can binding offers or non-binding reliable offers for a property be made in the course of a sale process (such as for investment properties classified as non-current assets or disposal groups held for sale), so that fair value can be determined on the basis of prices observable on the market (Level 2). The valuation is carried out at regular intervals.

The appraisals prepared to calculate the fair values are based on recognised appraisal methods used by independent external assessors, primarily taking the form of comparative-value, asset-value and income approaches. In the income approach, current market rents, management and maintenance costs and property yields are applied in the case of developed land. Where necessary, property-specific considerations are also taken into account when determining the value. Among other things, these property-specific factors include vacancy rates, deviations between current contractual rents and current market rents, as well as the condition of the buildings' technical systems. In the case of undeveloped land, figures for sales of nearby land that have been completed are normally taken as a basis; where these are not available, the standard land value is employed as a benchmark, with adjustments made for the individual location, size and layout of the land, among other factors.

An investment property is derecognised upon disposal or when it is permanently no longer to be used and future economic benefits from the disposal are no longer expected. The gain or loss on disposal is determined as the difference between the net proceeds on disposal and the carrying amount of the asset and is recognised through profit or loss in the consolidated income statement in the period of disposal.

In some cases, it may prove difficult to classify a property as an investment property rather than property, plant and equipment. Classification is especially difficult if part of the property is held by the Group as an investment while another part is used for the Bank's own purposes as an administration building, and the parts of the property cannot be sold separately or leased out under a finance lease, such that the two parts will not be accounted for separately. In such cases, HVB Group classifies a mixed usage property in full as an investment property if more than 90% of the property is leased to an external third party and the part of the property used by the Bank is of subordinate importance. The whole property is classified as property, plant and equipment if the part of the property leased externally totals 90% or less.

18 Intangible assets

The main items included in intangible assets are goodwill arising from the acquisition of fully consolidated subsidiaries and software. An intangible asset will only be recognised if it is probable that the expected future economic benefits attributable to the asset will flow to the entity and the cost of the asset can be measured reliably.

Goodwill has an indefinite useful life and is therefore not subject to scheduled amortisation. Consequently, it is only tested for impairment compliant with IAS 36 and not amortised (impairment only approach). The value of goodwill is tested annually and where there is an indication of impairment. Unscheduled impairment losses are taken where necessary. It is not permitted to write up in subsequent periods any impairment losses recognised on goodwill.

Software has a limited useful life and is valued at amortised acquisition or production cost. Scheduled amortisation is taken on a straight-line basis over an expected useful life of three to five years. Other intangible assets are also recognised at amortised acquisition or production cost less cumulative amortisation, as they have a limited useful life. Scheduled amortisation is taken on a straight-line basis over an expected useful life of up to ten years.

Where intangible assets additionally suffer impairment, we recognise an unscheduled impairment loss compliant with IAS 36. Should the reason for the unscheduled impairment no longer apply, write-ups are taken to the income statement in an amount no more than the amortised acquisition or production cost.

Unscheduled impairment losses on goodwill are shown in a separate item in the consolidated income statement.

Scheduled and unscheduled amortisation, impairments and write-ups on software and other intangible assets are recognised in the consolidated income statement under the item "Amortisation, depreciation and impairment losses on intangible and tangible assets" within operating costs.

19 Non-current assets or disposal groups held for sale

Under IFRS 5, non-current assets or disposal groups held for sale which are expected to be sold within one year are to be recognised as non-current assets or disposal groups held for sale. Upon reclassification, these are generally carried at the lower of the carrying amount or fair value less costs to sell at the reporting date. Upon subsequent measurement following reclassification, the non-current assets or disposal groups held for sale are, if necessary, written down to a lower fair value less costs to sell if this has fallen at subsequent reporting dates. Should the fair value increase, the total may be written up to an amount that is no more than the cumulative impairment loss.

Financial instruments in the sense of IFRS°9 and non-current assets measured according to the fair value model in IAS 40, for which the measurement requirements of the corresponding IFRS apply, are among the items exempt from the IFRS 5 measurement requirements.

Accounting and Valuation (Continued)

20 Liabilities

Deposits from banks and customers, and debt securities in issue that are not hedged items of an effective micro fair value hedge are carried as liabilities at amortised cost. Upon initial recognition, they are disclosed at their fair value including any transaction costs. Interest accruing on the liabilities is calculated using the effective interest method.

In the reporting year, HVB entered into targeted longer-term refinancing operations (TLTRO III) with the ECB. These are recognised in the balance sheet at cost using the effective interest method. The interest conditions depend on the fulfilment of certain lending criteria relating to two specific reporting periods defined by the ECB. HVB assumes that the lending criteria will be met for both periods. Compliance with the criteria is confirmed by both HVB's current planning for 2021 (the first period ends on 31 March 2021 and the second period on 31 December 2021) and a statistical model that updates the changes in the relevant lending volume based on historical data with a confidence level of 95%. On the assumption that the lending criteria are fulfilled, the resulting interest payments and premiums are taken into account accordingly as expected or estimated future cash inflows or outflows in order to determine the effective interest rate. HVB does not intend to make any premature repayments which means that a term of three years is expected for the funds raised. The effective interest rate calculated in this way amounts to minus 0.83% for the entire term. This interest rate represents a variable reference interest rate that the ECB stipulates for the entire term for its TLTRO III programmes, which provide favourable financing to the banking sector in order to stimulate bank lending to the economy. Consequently, the modifications adopted by the ECB in December 2020 are treated as an adjustment of the variable reference interest rate for the reference interest period and the effective interest rate has been adjusted accordingly.

21 Financial liabilities held for trading

This item includes the negative fair values of traded derivatives and all other derivatives that are not classified as hedging derivatives (which are recognised separately). Also included here are warrants, certificates and bonds issued by our trading department, liabilities under repurchase agreements as well as delivery obligations arising from short sales of securities held for trading purposes.

Financial liabilities held for trading are carried at fair value. Gains and losses arising from the valuation and realisation of financial liabilities held for trading are taken to the income statement as net trading income. We act as market maker for the structured products we issue.

With interest rate swaps, the two offsetting streams of interest payments are aggregated for each swap contract and reported in net terms as interest income or interest expense. In the case of pure derivatives trading portfolios, we report the netted interest payments under net trading income.

22 Financial liabilities at FVTPL

HVB Group designated certain liabilities as financial instruments to be measured at fair value through profit and loss (fair value option) upon initial recognition. In this context, financial instruments issued are designated on the basis of fair value-based management of the portfolios concerned.

Financial liabilities at fair value through profit or loss are disclosed upon initial recognition at their fair value without any transaction costs. Upon subsequent measurement, changes in fair value are recognised through profit or loss in the item "Net gains/losses on financial assets and liabilities at fair value". If part of the change in fair value is attributable to changes in own credit spread, this partial amount is corrected again in the income statement and then recognised through other comprehensive income. This procedure does not lead to any accounting anomaly in the income statement.

In equity, the reserve for the own credit spread is shown under "Other reserves". If there are any changes in the financial liabilities at FVTPL in the course of measurement at fair value on account of the own credit spread, these changes are recognised through other comprehensive income. If this reserve still contains amounts on the date of disposal of the liability, the relevant amounts are not recognised in the income statement and are generally reclassified to retained earnings.

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

Net changes in the hedged amount of hedged items are carried in this hedge adjustment of the portfolio fair value hedge to be shown separately (see the Note "Hedge adjustment of hedged items in the portfolio fair value hedge").

24 Other liabilities

Compliant with IAS 37, accruals and other items are shown under other liabilities. These reflect future expenditure of uncertain timing or amount, but the uncertainty is much less than for provisions. Accruals are liabilities for goods and services received that have been neither paid for nor invoiced by the supplier, nor formally agreed. This also includes current liabilities to employees, such as flexi-time credits and holiday entitlements. HVB Group carries accruals at the amount likely to be used.

25 Provisions

Present legal or constructive obligations as a result of past events involving a probable outflow of resources, and whose amount can be reliably estimated, are recognised as provisions.

When assessing provisions for uncertain liabilities and anticipated losses on onerous transactions, we use the best estimate compliant with IAS 37.36 ff. Long-term provisions are discounted.

In accordance with IAS 19, provisions for pensions and similar obligations arising from defined benefit plans are recorded on the basis of external actuarial reports by applying the projected unit credit method, with each pension plan being valued separately. This accrued benefit method pro-rated on service takes into account dynamic considerations when determining the expected pension benefits upon retirement and distributes these over the beneficiaries' entire period of employment. This means that the measurement of the defined benefit obligation is based on an actuarially calculated present value of the future benefit entitlement for services already rendered (vested benefit entitlements), taking into account the expected compensation increases including career trends and forecast pension progression. The actuarial assumptions to be defined when measuring the benefit obligation vary in line with the economic and other underlying conditions in the country in which the plans exist.

The underlying valuation assumptions may differ from the actual developments as a result of changing market, economic and social conditions. The actuarial gains or losses resulting from the change to the valuation parameters may have a significant impact on the amount of the obligations for pensions and similar post-employment benefits.

The discount rate used to discount the defined benefit obligations (actuarial interest rate) is determined by reference to yields recorded on the market at the reporting date for high quality, fixed-rate corporate bonds and with maturities and currencies that match the obligations to be measured. A basket of AA-rated corporate bonds denominated in euros serves as the data basis for determining the discount rate for the obligations. These individual bond data are translated into a yield curve which forms the basis for determining the discount rate by using a numerical compensation technique.

Funded pension obligations differ from unfunded pension obligations in that plan assets are allocated to cover the entitlements of the beneficiaries. The beneficiaries include active employees, former employees with vested benefit entitlements, and pensioners and their surviving dependants. Both HVB and a number of subsidiaries have set up plan assets in external, restricted-access pension organisations to fund their pension obligations.

If the beneficiaries' benefit entitlements or the Group's benefit obligations are not funded by assets, HVB Group recognises a pension provision in the amount of the present value of the defined benefit obligation (DBO) in its consolidated balance sheet.

Accounting and Valuation (Continued)

In the case of funded pension obligations, by contrast, the present value of the defined benefit obligation is set against the fair value of the plan assets to determine the net defined benefit liability or net defined benefit asset from the defined benefit plans. The net amount is recognised in the consolidated balance sheet as a pension provision in the event of an excess of liabilities over assets or under other assets in the event of an excess of assets over liabilities adjusted for any effects of the asset ceiling. In the event of excess allocations to the plan, the amount of the net defined benefit asset recognised in the balance sheet is limited to the present value of the economic benefits associated with the surplus plan assets.

In the case of defined benefit obligations, actuarial gains and losses are recognised immediately and in full in other comprehensive income (OCI) in the period in which they accrue. Consequently, the pension provision or other asset recognised in the consolidated balance sheet corresponds to the actual deficit or surplus for a given commitment.

Under the net interest approach, the net interest to be recognised in profit or loss for the period is calculated by multiplying the net defined benefit liability (asset) from defined benefit plans by the discount rate underlying the measurement of the defined benefit obligation. Since any plan assets are deduced from the net defined benefit liability (asset), this calculation method implicitly assumes the return on plan assets in the amount of the discount rate.

If the present value of a defined benefit obligation changes as a result of a plan amendment or plan curtailment, the Group recognises the ensuing effects in full as past service cost in the profit or loss for the period. The amount is normally recognised at the date when the plan amendment or plan curtailment occurs. The gains and losses when a plan is settled are also recognised directly in profit or loss when the settlement occurs.

The net pension expense of defined benefit obligations consists of a service cost component, a net interest component and a remeasurement component. This is recognised in the consolidated income statement and consolidated statement of total comprehensive income as follows:

The service cost component consists of the current and past service cost including the gains and losses on plan settlements. The net interest component comprises the interest expense on the defined benefit obligation, the interest income on plan assets and, in the event of excess allocations to the plan, the interest on any effects arising from the adjustment of the asset surplus to reflect the asset ceiling. The service cost and net interest components are taken to the consolidated income statement in profit or loss for the period. HVB Group also recognises the net interest component under expenses for pensions and similar employee benefits in payroll costs alongside the service cost component.

The remeasurement component encompasses the actuarial gains and losses arising from the valuation of the defined benefit obligation, the difference between the typical return on plan assets assumed at the beginning of the period in the amount of the discount rate and the actual return realised on plan assets and, in the event of excess allocations to the plan, any adjustment of the asset surplus to reflect the asset ceiling, excluding the amounts already recognised in net interest. This component is recognised immediately in shareholders' equity without affecting profit or loss. The remeasurements recognised in other comprehensive income in the consolidated statement of total comprehensive income may not be reclassified in later periods in profit or loss (no recycling).

The disclosure requirements for defined benefit plans contain a principles-based disclosure concept requiring companies to make judgements regarding the necessary level of detail or any emphases in the disclosures pertaining to defined benefit plans. The reporting is intended to meet the information needs of the users of the financial statements and give them a wide-ranging understanding of the risk structure and risk management of the pension plans (pension governance).

In contrast to defined benefit plans, no provisions for pensions and similar obligations are recognised for defined contribution plans. The amounts paid are recognised in the period of the payment taken to the income statement under payroll costs.

The provisions for pensions and similar obligations are described in detail in the Note "Provisions".

In accordance with IAS 19, the provisions for partial retirement and similar benefits recognised under other provisions are measured on the basis of external actuarial reports.

The top-up amounts promised under partial-retirement agreements are accounted for as other long-term employee benefits and the associated expenses accrued over their vesting period. HVB Group applies the first-in first-out (FiFo) method for the straight-line accrual of top-up benefits. The benefits are discounted to determine their present value. Remeasurements are recognised in profit or loss in the period in which they arise.

The other long-term employee benefits also include the deferred employee compensation under the Group's bonus programmes, if not expected to be settled wholly before twelve months after the end of the reporting period. The Group has a net liability in the amount of the future benefits to which the employees are entitled in exchange for the work performed in the current period and earlier periods. HVB Group recognises a bonus provision in the amount of the present value of these benefits in its consolidated balance sheet, with allocations made to the promised bonus amounts over the respective vesting period on a pro rata basis. Remeasurements of the net liability are recognised directly in profit or loss for the period.

The employee compensation schemes are described in detail in the Note "Operating costs".

26 Foreign currency translation

The consolidated financial statements are prepared in euros, which is the reporting currency of the corporate group. Amounts in foreign currency are translated in accordance with the principles set forth in IAS 21. This standard calls for monetary items not denominated in the respective functional currency (generally the local currency in each case) and cash transactions not completed at the valuation date to be translated into euros at the reporting date using current market rates. Non-monetary items carried at fair value are similarly translated into euros using current market prices at the valuation date. Non-monetary items carried at cost are translated using the historic rate applicable at the time of acquisition.

Income and expense items arising from foreign currency translation at the individual Group companies are stated under net trading income in the income statement.

Where they are not stated in euros, the assets and liabilities reported by our subsidiaries are translated using current market rates at the reporting date in the consolidated financial statements. Average rates are used to translate the income and expenses of these subsidiaries.

Exchange rate differences resulting from the translation of financial statements of international business units are recognised in shareholders' equity without affecting profit or loss and are only taken to the income statement if the operation is sold in part or in full.

27 Income tax for the period

Income tax for the period is accounted for in accordance with the principles set forth in IAS 12. Current taxes are determined taking into account local laws in the respective tax jurisdictions concerned. Apart from a few exceptions allowed for in the standard, deferred tax assets and liabilities are recognised for all temporary differences between the values stated in accordance with IFRS and the values stated for tax-reporting purposes (balance sheet approach). Deferred tax assets arising from unused losses carried forward for tax-reporting purposes are shown where permitted by IAS 12.

Since the concept is based on the approach using future tax assets and liabilities under the liability method, the assets and liabilities are computed using the relevant local tax rates that are expected to apply when the differences are reversed. Deferred tax assets and liabilities are offset provided the offsetting requirements defined in IAS 12 are met.

Segment Reporting

28 Method of segment reporting by business segment

In segment reporting, the activities of HVB Group are divided into the following business segments:
– Commercial Banking
– Corporate & Investment Banking
– Group Corporate Centre
– 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 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 business segments and for assessing the profitability. In this context, the segment data are determined in accordance with International Financial Reporting Standards (IFRS).

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

The income statement items of net fees and commissions, net trading profit and net other expenses/income shown in the business segments are based almost exclusively on transactions involving external customers. Net interest is assigned to the business 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 business segments is based on a uniform core capital allocation for each business segment. Pursuant to CRR II, this involves allocating 12.25% (previous year: 12.5%) of core capital from risk-weighted assets to the business 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 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. This rate is set for one year in advance as part of each budgeting process. The percentage changed to 0.91% in financial year 2020 after 0.98% 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 tangible and other intangible assets (without goodwill), are allocated to the appropriate business segment according to causation. The Other and the Group Corporate Centre business segments are treated as external service providers, charging the other business segments 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 business segment to determine the assigned costs that cannot be allocated directly. The majority of the depreciation and impairment losses taken on property, plant and equipment are posted for the real estate companies of HVB Group included in the Other business segment.

The profit of €19 million (previous year: €1 million) from shares in associates relates to the company Comtrade Group B.V., Rotterdam, accounted for using the equity method, which generated a gain on the disposal of a business segment. The company is assigned to the CIB business segment.
The disclosure in profit and loss is made under the item "Dividends and other income from equity investments" in the income statement. The carrying amount of the companies accounted for using the equity method is €11 million (previous year: €10 million). In the reporting year, an impairment loss of €3 million was charged to the carrying amount of the companies accounted for using the equity method (previous year: €3 million), which is reported under net income from investments. The companies Nautilus Tankers Limited, Valetta and paydirekt Beteiligungsgesellschaft privater Banken mbH, Berlin accounted for using the equity method and SwanCap Partners GmbH, Munich recognised under "Non-current assets or disposal groups held for sale" were sold in the previous year. The net income of €16 million from the sale is recognised in the previous year's consolidated income statement under the item "Net income from investments" and allocated to the CIB business segment.

29 Components of segment reporting by business segment

Commercial Banking business segment

The Commercial Banking business 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 (including high net worth individuals/ultra high net worth individuals and family offices), business and corporate customers, and commercial real estate customers. At the same time, the Commercial Banking business 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.

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 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. In this respect, Unternehmer Bank is one of the largest lenders to the German Mittelstand and their first choice from among the banks for Mittelstand companies. 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.

The Commercial Banking business segment is run by two members of the Management Board who bear joint responsibility. The business management and support functions are performed by a staff unit assigned to each of the business units. Reciprocal cross-servicing ensures that the products required are maintained only once.

Segment Reporting (Continued)

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

The success of CIB's business stems not only from the close cooperation and interaction between customer care and the product units but also from collaboration with other countries and business segments of UniCredit as well as the pertinent credit risk management units.

As CIB acts as a global business segment, all statements and definitions apply both to CIB within HVB Group and CIB at a global level. In the form of its CIB business 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'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) and Investment Holdings (GFO), 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) and Structured Trade and Export Finance (STEF). Further global business lines 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 the Commercial Banking business segment. The local unit Global Shipping (GLOS) conducts transactions worldwide. Portfolio & Pricing Management (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 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 and trade finance, thus meeting customer needs in connection with transactions in the areas of payment services, account information, cash flow optimisation, liquidity management and mainly short-term import and export financing services.

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

Trade finance and working capital offer supply chain finance solutions and conventional international trade products such as guarantees, letters of credit, collection services, etc. along the customer's value chain.

Markets is a customer-oriented product area that supports the corporate and institutional business of UniCredit 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, business customers and private investors risk management solutions and investment products through the Group's own or external networks.

With a view to achieving 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:
– value chains, growing importance of the approach of an integrated value chain across team boundaries, e.g. in the field of working capital
– capital structure advisory which enables the Bank to hold a focused and discerning strategic dialogue with customers
– advice on sustainable finance, combining sector expertise with capital market settlements
– shared goals, a structured objective-setting process between customer care and product lines
– senior bankers who serve selected key corporate and institutional customers as well as investment holdings/family offices
– industrial sector specialists were put in place to significantly enhance the quality of the strategic dialogue between the Bank and the top management of the companies served. In addition, the initiative is increasing the level of knowledge in the sales units

We are aiming to further expand our central role with core CIB customers, exploit opportunities with Mittelstand customers and become Europe's powerhouse for trade finance. We wish to increase our international footprint by selling our international services to customers in our core countries, strategically expand our presence in countries given special priority as well as standardising and refining our operating platform.

At the same time, we are aligning our presence with the developments of trade flows in order to win as customers the best international actors outside of our home markets. Furthermore, we would like to become the "go-to bank" for business customers by expanding the cross-selling opportunities as well as the underwriting and distribution capacities. We are also striving to heighten the service commitment for banks.

Segment Reporting (Continued)

In addition, CIB maintains a close cooperation with Commercial Banking. With a view to promoting the realisation of synergies within the UniCredit corporate group and the "One Bank" approach, the UniCredit International Centres ("UIC") concept was extended from Commercial Banking to CIB. 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.

Group Corporate Centre business segment

The Group Corporate Centre business segment includes profit contributions that do not fall within the jurisdiction of the individual business segments. Among other items, this includes the Chief Financial Office, Credit Risk Office and Chief Executive Office business units as well as the profits and losses of consolidated subsidiaries and non-consolidated holdings, provided they are not assigned to the other business segments. Furthermore, this business unit incorporates the net income from securities holdings for which the Management Board is responsible. Also incorporated in this business unit are the amounts arising from decisions taken by management with regard to asset/liability management. This includes contributions to earnings from securities and money trading activities involving UniCredit S.p.A. and its subsidiaries. The Group Corporate Centre business segment also includes the Real Estate Restructuring customer portfolio.

Other business segment

The Other business 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.

30 Income statement, broken down by business segment

Income statement, broken down by business segment for the period from 1 January to 31 December 2020 (€ millions)

INCOME/EXPENSES	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	GROUP CORPORATE CENTRE	OTHER	CONSOLIDATION	HVB GROUP
Net interest	1,475	887	68	(2)	(15)	2,413
Dividends and other income from equity investments	11	24	2	—	—	37
Net fees and commissions	713	300	(5)	(1)	—	1,007
Net trading income	65	503	(3)	(1)	—	564
Net other expenses/income	(8)	(49)	30	66	(13)	26
OPERATING INCOME	**2,256**	**1,665**	**92**	**62**	**(28)**	**4,047**
Payroll costs	(607)	(365)	(359)	(120)	—	(1,451)
Other administrative expenses	(1,029)	(698)	329	154	13	(1,231)
Amortisation, depreciation and impairment losses on						
intangible and tangible assets	(14)	(10)	(9)	(93)	—	(126)
Operating costs	**(1,650)**	**(1,073)**	**(39)**	**(59)**	**13**	**(2,808)**
OPERATING PROFIT/(LOSS)	**606**	**592**	**53**	**3**	**(15)**	**1,239**
Net write-downs of loans and provisions for guarantees						
and commitments	(382)	(376)	25	—	—	(733)
NET OPERATING PROFIT/(LOSS)	**224**	**216**	**78**	**3**	**(15)**	**506**
Provisions for risks and charges	16	1	(9)	3	—	11
Restructuring costs	(25)	(3)	(1)	(6)	—	(35)
Net income from investments	(1)	17	(1)	575	—	590
PROFIT/(LOSS) BEFORE TAX	**214**	**231**	**67**	**575**	**(15)**	**1,072**
Income tax for the period	(90)	(130)	2	(191)	5	(404)
PROFIT/(LOSS) AFTER TAX	**124**	**101**	**69**	**384**	**(10)**	**668**
Impairment on goodwill	—	—	—	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**124**	**101**	**69**	**384**	**(10)**	**668**
attributable to the shareholder of UniCredit Bank AG	124	101	69	384	(10)	668
attributable to minorities	—	—	—	—	—	—

Segment Reporting (Continued)

Reconciliation of the segmented income statement to the income statement (€ millions)

INCOME/EXPENSES	INCOME STATEMENT, BROKEN DOWN BY BUSINESS SEGMENT	RECLASSIFICATION	CONSOLIDATED INCOME STATEMENT
Net interest	2,413	—	2,413
Dividends and other income from equity investments	37	—	37
Dividends from assets mandatorily at FVTPL		—	
Net fees and commissions	1,007	—	1,007
Net trading income	564	98	662
Financial assets mandatorily at FVTPL		15	
Financial liabilities designated at FVTPL		33	
Buy-backs of securities issued		1	
Effects arising from hedge accounting		59	
Fair value equity		(10)	
Dividends from assets mandatorily at FVTPL		—	
Net gains/(losses) on financial assets and liabilities at fair value	n/a	(78)	(78)
Financial assets mandatorily at FVTPL		(15)	
Financial liabilities designated at FVTPL		(33)	
Net gains/(losses) on the sale of financial securities (held-for-sale business model)		19	
Effects arising from hedge accounting		(59)	
Fair value equity		10	
Net gains/(losses) on derecognition of financial instruments measured at cost	n/a	(3)	(3)
Net gains/(losses) on the sale of performing loans and receivables and securities		(1)	
Buy-backs of securities issued		(1)	
Promissory notes (assets side)		(1)	
Net other expenses/income	26	577	603
Net gains/(losses) on the sale of performing loans and receivables and securities		1	
Promissory notes (assets side)		1	
Income from the sale of land and buildings		549	
Income from the valuation/disposal of investment properties		25	
Income from the sale of other assets		1	
OPERATING INCOME	**4,047**	**594**	**4,641**
Payroll costs	(1,451)	—	(1,451)
Other administrative expenses	(1,231)	—	(1,231)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(126)	—	(126)
Operating costs	**(2,808)**	**—**	**(2,808)**
OPERATING PROFIT/(LOSS)	**1,239**	**594**	**1,833**
Net write-downs of loans and provisions for guarantees and commitments IAS 39/ Credit impaired losses IFRS 9	(733)	—	(733)
NET OPERATING PROFIT/(LOSS)	**506**	**594**	**1,100**
Provisions for risks and charges	11	—	11
Restructuring costs	(35)	—	(35)
Net income from investments	590	(590)	n/a
Net gains/(losses) on the sale of securities (held-for-sale business model)		(19)	
Income from the sale of land and buildings		(549)	
Income from the valuation/disposal of investment properties		(25)	
Income from the sale of other assets		(1)	
Net gains/(losses) on disposal of investments		4	
Net gains/(losses) on disposal of investments	n/a	(4)	(4)
PROFIT/(LOSS) BEFORE TAX AND IMPAIRMENT ON GOODWILL	**n/a**	**n/a**	**1,072**
Impairment on goodwill	—	—	—
PROFIT/(LOSS) BEFORE TAX	**1,072**	**—**	**1,072**
Income tax for the period	(404)	—	(404)
PROFIT/(LOSS) AFTER TAX	**668**	**—**	**668**
Impairment on goodwill	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**668**	**—**	**668**
attributable to the shareholder of UniCredit Bank AG	668	—	668
attributable to minorities	—	—	—

Income statement, broken down by business segment for the period from 1 January to 31 December 2019 (€ millions)

INCOME/EXPENSES	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	GROUP CORPORATE CENTRE	OTHER	CONSOLIDA-TION	HVB GROUP
Net interest	1,491	878	49	(6)	(24)	2,388
Dividends and other income from equity investments	2	1	1	—	—	4
Net fees and commissions	722	258	(6)	1	(2)	973
Net trading income	63	636	4	—	—	703
Net other expenses/income	4	141	75	74	6	300
OPERATING INCOME	**2,282**	**1,914**	**123**	**69**	**(20)**	**4,368**
Payroll costs	(587)	(391)	(364)	(111)	—	(1,453)
Other administrative expenses	(1,028)	(699)	332	157	18	(1,220)
Amortisation, depreciation and impairment losses on						
intangible and tangible assets	(14)	(389)	(8)	(72)	—	(483)
Operating costs	**(1,629)**	**(1,479)**	**(40)**	**(26)**	**18**	**(3,156)**
OPERATING PROFIT/(LOSS)	**653**	**435**	**83**	**43**	**(2)**	**1,212**
Net write-downs of loans and provisions for guarantees and commitments	(112)	(15)	12	—	—	(115)
NET OPERATING PROFIT/(LOSS)	**541**	**420**	**95**	**43**	**(2)**	**1,097**
Provisions for risks and charges	111	199	26	(23)	—	313
Restructuring costs	(118)	(58)	(101)	(86)	—	(363)
Net income from investments	14	6	313	111	—	444
PROFIT/(LOSS) BEFORE TAX	**548**	**567**	**333**	**45**	**(2)**	**1,491**
Income tax for the period	(197)	(240)	(102)	(12)	18	(533)
PROFIT/(LOSS) AFTER TAX	**351**	**327**	**231**	**33**	**16**	**958**
Impairment on goodwill	(130)	—	—	—	—	(130)
CONSOLIDATED PROFIT/(LOSS)	**221**	**327**	**231**	**33**	**16**	**828**
attributable to the shareholder of UniCredit Bank AG	221	327	214	33	16	811
attributable to minorities	—	—	17	—	—	17

Segment Reporting (Continued)

Development of the Commercial Banking business segment (€ millions)

INCOME/EXPENSES	1/1–31/12/2020	1/1–31/12/2019	CHANGE € millions	CHANGE in %
Net interest	1,475	1,491	(16)	(1.1)
Dividends and other income from equity investments	11	2	+ 9	>+ 100.0
Net fees and commissions	713	722	(9)	(1.2)
Net trading income	65	63	+ 2	+ 3.2
Net other expenses/income	(8)	4	(12)	
OPERATING INCOME	**2,256**	**2,282**	**(26)**	**(1.1)**
Payroll costs	(607)	(587)	(20)	+ 3.4
Other administrative expenses	(1,029)	(1,028)	(1)	+ 0.1
Amortisation, depreciation and impairment losses				
on intangible and tangible assets	(14)	(14)	—	—
Operating costs	**(1,650)**	**(1,629)**	**(21)**	**+ 1.3**
OPERATING PROFIT/(LOSS)	**606**	**653**	**(47)**	**(7.2)**
Net write-downs of loans and provisions for guarantees and commitments	(382)	(112)	(270)	>+ 100.0
NET OPERATING PROFIT/(LOSS)	**224**	**541**	**(317)**	**(58.6)**
Provisions for risks and charges	16	111	(95)	(85.6)
Restructuring costs	(25)	(118)	+ 93	(78.8)
Net income from investments	(1)	14	(15)	
PROFIT/(LOSS) BEFORE TAX	**214**	**548**	**(334)**	**(60.9)**
Income tax for the period	(90)	(197)	+ 107	(54.3)
PROFIT/(LOSS) AFTER TAX	**124**	**351**	**(227)**	**(64.7)**
Impairment on goodwill	—	(130)	+ 130	(100.0)
CONSOLIDATED PROFIT/(LOSS)	**124**	**221**	**(97)**	**(43.9)**
attributable to the shareholder of UniCredit Bank AG	124	221	(97)	(43.9)
attributable to minorities	—	—	—	—
Cost-income ratio in %[1]	73.1	71.4		

1 Ratio of operating costs to operating income.

In the reporting year, the Commercial Banking business segment generated operating profit (before net write-downs of loans and provisions for guarantees and commitments) of €606 million, which is thus €47 million, or 7.2%, lower than the previous year's level.

At €2,256 million, operating income was €26 million, or 1.1%, lower than the previous year and thus almost matched the level of €2,282 million in the previous-year period. The net interest of €1,475 million contained in operating income was only a slight 1.1% lower than the figure of €1,491 million in the previous-year period despite the still extremely low level of interest rates. These persistently ultra-low interest rates continued to weigh heavily on the customer deposit business that was, however, partially compensated by a slight increase in real estate financing in the retail banking business, a slight rise in income from the lending business in corporate customer activities and an adjustment of customer interest rates to the low market interest rate level in the deposit business.

Net fees and commissions declined slightly by €9 million, or 1.2%, to €713 million compared with the previous-year period.

There was a marginal rise in net trading income of €2 million, or 3.2%, from €63 million in the previous-year period to €65 million in the reporting period.

Net other expenses/income reports an expense of €8 million for the reporting period. This represents a marked decline of €12 million compared with income of €4 million in the previous-year period and is attributable to a higher charge for the European bank levy.

A significant rise in dividends and other income from equity investments contributed €11 million to operating income in the current reporting period compared with the €2 million in the previous-year period.

Compared with the previous-year period, operating costs were up by €21 million, or 1.3%, to €1,650 million. This is largely due to higher payroll costs, which increased by €20 million, or 3.4%, to €607 million compared with the previous-year period. The increase is attributable to higher contributions to pension schemes in addition to regular salary adjustments and additional capacities in the growth regions.

The cost-income ratio rose slightly to 73.1% in the current reporting period compared with 71.4% in the previous-year period.

At €382 million, the item net write-downs of loans and provisions for guarantees and commitments shows a significant increase in net additions of €270 million compared with the figure of €112 million in the previous-year period. Net operating profit of €224 million was thus 58.6%, or €317 million, sharply below the profit of €541 million generated in the previous year.

In the reporting year, there was net income of €16 million from the reversal of provisions after €111 million in the previous year. In April 2019, the Bank reached a settlement with the US and New York authorities to conclude the proceedings for violations of US economic sanctions in the period from 2002 to 2012. The amounts payable according to the settlement were lower than the provisions set aside for it in previous years, which allowed the excess to be reversed in the previous year.

Restructuring costs of €25 million in the reporting year were a sharp €93 million, or 78.8%, lower than those in the previous-year period in the amount of €118 million.

Net income from investments reports an expense of €1 million in the current reporting period after reporting income of €14 million in the previous-year period.

Overall, the Commercial Banking business segment generated a profit before tax of €214 million in the reporting period, which is very markedly lower than the previous-year figure of €548 million as a result of the net addition to net write-downs of loans and provisions for guarantees and commitments. Income tax for the reporting period shows an income tax expense of €90 million, which is 54.3% lower than the income tax expense of €197 million in the previous-year period.

The Commercial Banking business segment reports a profit after tax of €124 million for the reporting year, which is sharply lower than the comparative figure of the previous-year period of €222 million.

Segment Reporting (Continued)

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

INCOME/EXPENSES	1/1–31/12/2020	1/1–31/12/2019	CHANGE € millions	CHANGE in %
Net interest	887	878	+ 9	+ 1.0
Dividends and other income from equity investments	24	1	+ 23	>+ 100.0
Net fees and commissions	300	258	+ 42	+ 16.3
Net trading income	503	636	(133)	(20.9)
Net other expenses/income	(49)	141	(190)	
OPERATING INCOME	**1,665**	**1,914**	**(249)**	**(13.0)**
Payroll costs	(365)	(391)	+ 26	(6.6)
Other administrative expenses	(698)	(699)	+ 1	(0.1)
Amortisation, depreciation and impairment losses on				
intangible and tangible assets	(10)	(389)	+ 379	(97.4)
Operating costs	**(1,073)**	**(1,479)**	**+ 406**	**(27.5)**
OPERATING PROFIT/(LOSS)	**592**	**435**	**+ 157**	**+ 36.1**
Net write-downs of loans and provisions for guarantees and commitments	(376)	(15)	(361)	>+ 100.0
NET OPERATING PROFIT/(LOSS)	**216**	**420**	**(204)**	**(48.6)**
Provisions for risks and charges	1	199	(198)	(99.5)
Restructuring costs	(3)	(58)	+ 55	(94.8)
Net income from investments	17	6	+ 11	>+ 100.0
PROFIT/(LOSS) BEFORE TAX	**231**	**567**	**(336)**	**(59.3)**
Income tax for the period	(130)	(240)	+ 110	(45.8)
PROFIT/(LOSS) AFTER TAX	**101**	**327**	**(226)**	**(69.1)**
Impairment on goodwill	—	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**101**	**327**	**(226)**	**(69.1)**
attributable to the shareholder of UniCredit Bank AG	101	327	(226)	(69.1)
attributable to minorities	—	—	—	—
Cost-income ratio in %[1]	64.4	77.3		

1 Ratio of operating costs to operating income.

In the reporting year, the Corporate & Investment Banking business segment generated operating income of €1,665 million and thus remained a significant 13.0% below the income of €1,914 million in the previous-year period.

The primary cause of this development is the substantial decline in net trading income, which is down by 20.9%, or €133 million, to €503 million compared with the previous-year period. This decline is primarily attributable to market turbulence relating to the COVID-19 pandemic and the associated valuation discounts. However, the retail banking business proved to be largely stable, showing a slight upward trend.

Net other expenses/income reported an expense of €49 million, whereas income of €141 million was reported in the previous-year period. The year-ago result contains a positive non-recurrent effect from the Bard Offshore 1 wind farm.

Even the marginal year-on-year increase of 1% in net interest at €887 million and the rise of €42 million, or 16.3%, to €300 million in net fees and commissions only partially offset these declines. The rise in net fees and commissions is attributable to higher commissions and advisory fees due to greater demand by companies for equity or borrowings using capital market products, such as bonds or share issues.

Dividends and other income from equity investments amounted to €24 million (previous-year period: €1 million). In the current year, significant income was generated in connection with a financial investment.

Operating costs fell a sharp €406 million, or 27.5%, to €1,073 million after €1,479 million in the previous-year period. This is mainly due to the decline of €379 million in depreciation. In the previous-year period, this item still contained the depreciation on the BARD Offshore 1 wind farm, for which an unscheduled write-down of €315 million was taken in addition to the scheduled depreciation for the first half of 2019. Furthermore, payroll costs fell slightly by €26 million, or 6.6%, to €365 million compared with the previous-year period whereas other administrative expenses, at €698 million, remained at the previous year's level.

Despite the decline in the earnings trend based on lower costs, the cost-income ratio fell to 64.4% after 77.3% in the 2019 financial year.

At €376 million, the item net write-downs of loans and provisions for guarantees and commitments reports a substantial increase of €361 million in net additions compared with the previous-year period (down €15 million).

Net operating profit recognised in the current reporting period amounts to €216 million, which is €204 million or 48.6% lower than in the previous-year period.

In the reporting year, net income from the reversal of provisions for risks and charges totalled €1 million after €199 million in the previous-year period. In April 2019, the Bank reached a settlement with the US and New York authorities to conclude the proceedings for violations of US economic sanctions in the period from 2002 to 2012. The amounts payable according to the settlement were lower than the provisions set aside for it in previous years, which allowed the excess to be reversed in the previous year.

At €17 million, net income from investments in the reporting period is significantly higher than the figure of €6 million in the previous-year period.

The Corporate & Investment Banking business segment generated a profit before tax of €231 million in the reporting year, which is well below the previous-year figure of €567 million.

Income tax in the reporting period came to €130 million compared with €240 million in the previous-year period.

The Corporate & Investment Banking business segment reports a profit after tax of €101 million for the reporting year compared with the profit after tax of €327 million in the previous-year period.

Segment Reporting (Continued)

Development of the Group Corporate Centre business segment (€ millions)

INCOME/EXPENSES	1/1–31/12/2020	1/1–31/12/2019	CHANGE € millions	CHANGE in %
Net interest	68	49	+ 19	+ 38.8
Dividends and other income from equity investments	2	1	+ 1	+ 100.0
Net fees and commissions	(5)	(6)	+ 1	(16.7)
Net trading income	(3)	4	(7)	
Net other expenses/income	30	75	(45)	(60.0)
OPERATING INCOME	**92**	**123**	**(31)**	**(25.2)**
Payroll costs	(359)	(364)	+ 5	(1.4)
Other administrative expenses	329	332	(3)	(0.9)
Amortisation, depreciation and impairment losses on				
intangible and tangible assets	(9)	(8)	(1)	+ 12.5
Operating costs	**(39)**	**(40)**	**+ 1**	**(2.5)**
OPERATING PROFIT/(LOSS)	**53**	**83**	**(30)**	**(36.1)**
Net write-downs of loans and provisions for guarantees and commitments	25	12	+ 13	>+ 100.0
NET OPERATING PROFIT/(LOSS)	**78**	**95**	**(17)**	**(17.9)**
Provisions for risks and charges	(9)	26	(35)	
Restructuring costs	(1)	(101)	+ 100	(99.0)
Net income from investments	(1)	313	(314)	
PROFIT/(LOSS) BEFORE TAX	**67**	**333**	**(266)**	**(79.9)**
Income tax for the period	2	(102)	+ 104	
PROFIT/(LOSS) AFTER TAX	**69**	**231**	**(162)**	**(70.1)**
Impairment on goodwill	—	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**69**	**231**	**(162)**	**(70.1)**
attributable to the shareholder of UniCredit Bank AG	69	214	(145)	(67.8)
attributable to minorities	—	17	(17)	(100.0)
Cost-income ratio in %[1]	42.4	32.5		

1 Ratio of operating costs to operating income.

In the reporting period, the Group Corporate Centre business segment generated operating income of €92 million, which has thus risen sharply by €31 million, or 25.2%, compared with €123 million in the previous-year period.

Net interest improved very significantly by €19 million to €68 million compared with €49 million in the previous-year period. This is largely due to extraordinary interest income on account of concluded fiscal court proceedings.

Dividends and other income from equity investments of €2 million were recognised in the reporting period.

Net fees and commissions improved by €1 million or 16.7% compared with the previous-year period and report a commission expense of €5 million for the current reporting period.

On account of IFRS 9 fair value adjustments, net trading income fell significantly by €7 million from trading income of €4 million in the previous-year period to a trading loss of €3 million in the current reporting period.

The decline in net other expenses/income of €45 million to €30 million in the reporting year is due to the sales concluded in the previous year.

With a marginal decline of €1 million or 2.5% in operating costs compared with the previous-year period, operating profit amounted to €53 million after €83 million in the previous-year period, which represents a very significant decline of 36.1%.

There were net reversals of €25 million in net write-downs of loans and provisions for guarantees and commitments in the reporting period and of €12 million in the previous-year period. Net operating profit totalled €78 million after €95 million in the previous-year period and thus shows a very substantial decrease of 17.9%.

With a loss of €1 million, net income from investments was very considerably lower than the figure of €313 million reported in the previous-year period.

Profit before tax of €67 million for the Group Corporate Centre business segment was substantially lower than the figure of €333 million in the previous-year period, which is largely attributable to the income generated under net income from investments.

Tax income of €2 million was posted under income tax for the reporting period, whereas there was a tax expense of €102 million in the previous-year period.

The Group Corporate Centre business segment reports a profit after tax of €69 million for the reporting period, which is well below the comparative figure of the previous year (€231 million) by 70.1%.

There were no expenses for the impairment of goodwill.

The cost-income ratio for the reporting period amounts to 42.4% and is thus significantly higher than the level in the previous-year period (32.5%).

Segment Reporting (Continued)

Development of the Other business segment (€ millions)

INCOME/EXPENSES	1/1–31/12/2020	1/1–31/12/2019	CHANGE € millions	CHANGE in %
Net interest	(2)	(6)	+ 4	(66.7)
Dividends and other income from equity investments	—	—	—	—
Net fees and commissions	(1)	1	(2)	
Net trading income	(1)	—	(1)	
Net other expenses/income	66	74	(8)	(10.8)
OPERATING INCOME	**62**	**69**	**(7)**	**(10.1)**
Payroll costs	(120)	(111)	(9)	+ 8.1
Other administrative expenses	154	157	(3)	(1.9)
Amortisation, depreciation and impairment losses on				
intangible and tangible assets	(93)	(72)	(21)	+ 29.2
Operating costs	**(59)**	**(26)**	**(33)**	**>+ 100.0**
OPERATING PROFIT/(LOSS)	**3**	**43**	**(40)**	**(93.0)**
Net write-downs of loans and provisions for guarantees and commitments	—	—	—	—
NET OPERATING PROFIT/(LOSS)	**3**	**43**	**(40)**	**(93.0)**
Provisions for risks and charges	3	(23)	+ 26	
Restructuring costs	(6)	(86)	+ 80	(93.0)
Net income from investments	575	111	+ 464	>+ 100.0
PROFIT/(LOSS) BEFORE TAX	**575**	**45**	**+ 530**	**>+ 100.0**
Income tax for the period	(191)	(12)	(179)	>+ 100.0
PROFIT/(LOSS) AFTER TAX	**384**	**33**	**+ 351**	**>+ 100.0**
Impairment on goodwill	—	—	—	—
CONSOLIDATED PROFIT/(LOSS)	**384**	**33**	**+ 351**	**>+ 100.0**
attributable to the shareholder of UniCredit Bank AG	384	33	+ 351	>+ 100.0
attributable to minorities	—	—	—	—
Cost-income ratio in %[1]	95.2	37.7		

1 Ratio of operating costs to operating income.

The Other business segment generated operating income of €62 million in the reporting year and is thus €7 million, or 10.1%, lower than the figure of €69 million reported in the previous-year period.

The very sharp rise in operating costs of €33 million to €59 million is largely due to an increase of €21 million, or 29.2%, to €93 million in amortisation, depreciation and impairment losses compared with €72 million in the previous-year period. The increase in payroll costs is attributable to regular salary adjustments, higher pension contributions and reorganisations during the year. The real estate functions outsourced in the 2019 financial year were only shown on a pro-rata basis but are shown for the full year in the 2020 financial year.

The Other business segment generated operating profit of €3 million in the reporting period, which is a sharp €40 million, or 93.0%, below the previous-year period of €43 million.

On account of the slight decline in operating income and the very distinct increase in operating costs, the cost-income ratio increased to 95.2% in the reporting period after 39.1% in the previous-year period.

In the Other business 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 €3 million and is €40 million, or 93.0%, lower than the previous-year figure of €43 million.

In the current reporting period, provisions for risks and charges shows income of €3 million from a reversal, whereas an expense of €23 million was incurred from an addition in the previous-year period. “Restructuring costs” amounted to €6 million, thus declining very substantially compared with the figure of €86 million reported in the previous-year period.

At €575 million, net income from investments posted a very significant increase of €464 million compared with the previous-year period. The income recognised under this item in the reporting period is primarily attributable to the sale of the “Am Tucherpark” site, which was completed in early 2020.

Overall, the Other business segment generated profit before tax of €575 million in the reporting year, which is primarily due to net income from investments.

On account of the generated net income from investments, the income tax expense for the reporting period rose to €191 million after €12 million in the previous-year period.

For the reporting year, the Other business segment reported profit after tax of €384 million, which represents a very substantial increase of €351 million compared with the previous year’s figure of €33 million.

Segment Reporting (Continued)

31 Balance-sheet figures, broken down by business segment

(€ millions)

	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	GROUP CORPORATE CENTRE	OTHER	CONSOLIDATION	HVB GROUP[2]
Loans and receivables with banks (at cost)						
31/12/2020	265	31,601	345	970	(1,078)	32,103
31/12/2019	30	30,701	371	272	(402)	30,972
Loans and receivables with customers (at cost)[1]						
31/12/2020	86,139	40,151	1,126	—	(1,740)	125,676
31/12/2019	86,294	43,168	1,100	—	(2,484)	128,078
Deposits from customers						
31/12/2020	101,195	40,337	2,860	—	(1,086)	143,306
31/12/2019	88,244	35,178	1,907	—	(402)	124,927
Risk-weighted assets compliant with Basel III						
(including equivalents for market risk						
and operational risk)						
31/12/2020	31,623	41,490	3,945	3,935	(356)	80,637
31/12/2019	31,334	45,370	4,819	3,715	217	85,455

1 "Loans and receivables with customers (at cost)" do not contain any securities holdings for internal management purposes.
2 Balance-sheet figures for non-current assets or disposal groups held for sale are shown separately in the Notes "Non-current assets or disposal groups held for sale" and "Liabilities of disposal groups held for sale".

32 Employees, broken down by business segment[1]

	2020	2019
Commercial Banking	5,928	6,163
Corporate & Investment Banking	1,827	1,860
Group Corporate Centre	3,211	3,099
Other	1,108	1,072
Consolidation	—	—
Total	**12,074**	**12,194**

1 In full-time equivalents (FTEs).

33 Segment reporting by region

The allocation of amounts to regions is based on the head office of the Group companies or offices involved.

Income statement, broken down by region (€ millions)

	2020		2019	
	OPERATING INCOME	OPERATING PROFIT/(LOSS)	OPERATING INCOME	OPERATING PROFIT/(LOSS)
Germany	5,118	2,022	4,787	1,574
Italy	66	27	85	145
Luxembourg	55	42	39	31
United Kingdom	160	116	169	67
Rest of Europe	15	49	16	50
Americas	98	45	112	67
Asia	57	19	58	30
Consolidation	(928)	(487)	(439)	(293)
HVB Group	**4,641**	**1,833**	**4,827**	**1,671**

Total assets, broken down by region (€ millions)

	2020	2019
Germany	321,241	282,334
Italy	32,618	26,417
Luxembourg	11,203	12,899
United Kingdom	8,417	11,216
Rest of Europe	8,820	8,924
Americas	5,061	6,287
Asia	7,885	8,880
Consolidation	(57,121)	(53,359)
HVB Group	**338,124**	**303,598**

Segment Reporting (Continued)

Property, plant and equipment, broken down by region (€ millions)

	2020	2019
Germany	2,383	2,390
Italy	19	21
Luxembourg	70	27
United Kingdom	18	34
Rest of Europe	1	1
Americas	23	28
Asia	11	6
Consolidation	—	—
HVB Group	**2,525**	**2,507**

Investment properties, broken down by region (€ millions)

	2020	2019
Germany	250	263
Italy	—	—
Luxembourg	102	90
United Kingdom	—	—
Rest of Europe	—	—
Americas	—	—
Asia	—	—
Consolidation	—	—
HVB Group	**352**	**353**

Intangible assets, broken down by region (€ millions)

	2020	2019
Germany	8	15
Italy	—	—
Luxembourg	—	—
United Kingdom	—	—
Rest of Europe	—	—
Americas	—	—
Asia	—	—
Consolidation	—	—
Total	**8**	**15**

Employees, broken down by region[1]

	2020	2019
Germany	11,043	11,139
Italy	242	241
Luxembourg	30	30
United Kingdom	304	324
Rest of Europe	196	203
Africa	—	—
Americas	115	117
Asia	144	140
HVB Group	**12,074**	**12,194**

1 In full-time equivalents (FTEs).

Notes to the Income Statement

34 Net interest

(€ millions)

	2020	2019
Interest income	3,423	3,845
from financial assets at cost	2,442	2,894
from financial assets at FVTOCI	44	41
from financial assets at FVTPL and hedging derivatives	500	455
from financial assets held for trading	269	343
other interest income	168	112
Negative interest on financial assets	(211)	(131)
Interest expense	(1,207)	(1,573)
from financial liabilities at cost	(712)	(999)
of which from lease liabilities	(6)	(6)
from financial liabilities at FVTPL and hedging derivatives	(81)	(76)
from financial liabilities held for trading	(353)	(471)
other interest expense	(61)	(27)
Negative interest on financial liabilities	408	247
Total	**2,413**	**2,388**

In the reporting year, HVB Group generated €24 million (previous-year period: €29 million) in interest income on impaired financial assets that are valued at cost.

Negative interest mainly relates to securities repurchase agreements, overnight deposits and forward transactions with banks and institutional investors.

In addition, negative interest for financial liabilities includes €113 million relating to the participation in the ECB's TLTRO III programme set up in the reporting year. In the course of 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)

	2020	2019
Non-consolidated affiliates	(1)	28
of which:		
UniCredit S. p. A.	(21)	10
sister companies	20	18
subsidiaries	—	—
Joint ventures	—	7
Associates	1	4
Other investees	10	13
Total	**10**	**52**

35 Dividends and other income from equity investments

(€ millions)

	2020	2019
Dividends and other similar income	18	23
Companies accounted for using the equity method	19	1
Total	**37**	**24**

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.

36 Net fees and commissions

(€ millions)

	2020	2019
Fee and commission income	1,346	1,286
Securities services for clients	632	566
Payment transactions	291	298
Lending business	139	147
Guarantees	127	127
Distribution of third party products	99	105
Other commission income	58	43
Fee and commission expense	(339)	(313)
Securities services for clients	(178)	(163)
Payment transactions	(69)	(70)
Lending business	(9)	(16)
Guarantees	(5)	(6)
Distribution of third party products	—	—
Other commission expense	(78)	(58)
Net fees and commissions	**1,007**	**973**

Fee and commission income of €74 million (previous-year period: €77 million) and fee and commission expense of €3 million (previous-year period: €3 million) relate to financial instruments not measured at fair value through profit or loss.

Fees and commissions charged for individual services are recognised as soon as the service has been provided. In contrast, deferred income is recognised for fees and commissions relating to a specific period (such as fees for financial guarantees).

Net fees and commissions from related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	(29)	(27)
of which:		
UniCredit S. p. A.	(7)	(5)
sister companies	(22)	(22)
subsidiaries	—	—
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**(29)**	**(27)**

Notes to the Income Statement (Continued)

37 Net trading income

(€ millions)

	2020	2019
Net gains on financial instruments held for trading[1]	662	579
Total	**662**	**579**

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 increase in valuation discounts in the course of determining fair values weighed down net trading income by minus €32 million (previous year: minus €62 million).

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

(€ millions)

	2020	2019
Financial assets mandatorily at FVTPL	(15)	(11)
Financial liabilities designated at FVTPL	(33)	54
Derecognition from OCI	19	4
Effects arising from hedge accounting	(59)	48
Fair value equity	10	13
Total	**(78)**	**108**

(€ millions)

	2020	2019
Fair value hedges	(59)	48
Changes in fair value of hedged items	(51)	(298)
Portfolio fair value hedges	(251)	(411)
Micro fair value hedges	200	113
Changes in fair value of hedging instruments	(8)	346
Portfolio fair value hedges	191	458
Micro fair value hedges	(199)	(112)
Cash flow hedges	—	—
Net gains/(losses) on the cash flows hedge (only ineffective part)	—	—
Total	**(59)**	**48**

The hedge accounting effects of the main hedge accounting approaches of HVB Group are described 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 AMOUNTS		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 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)
Balance at 31/12/2019								
Nominal								
Hedged items	550	10,167	3,533	—	—	—	—	—
Hedging transactions	550	10,167	3,533	—	—	—	—	—
Interest rate sensitivities in BPV								
Hedged items	—	(4)	(2)	—	—	—	—	—
Hedging transactions	—	4	2	—	—	—	—	—
Balance sheet values								
Hedged items	—	—	—	142	—	14,370	—	—
Hedging transactions	—	—	—	—	—	2	357	—
Hedge result								1
Hedged items	—	—	—	—	—	—	—	113
Hedging transactions	—	—	—	—	—	—	—	(112)

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.

Notes to the Income Statement (Continued)

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 AMOUNTS		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 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
Balance at 31/12/2019								
Interest rate sensitivities in BPV								
Hedged items								
EUR	1	5	12	—	—	—	—	—
USD	—	—	—	—	—	—	—	—
CHF	—	—	—	—	—	—	—	—
GBP	—	—	—	—	—	—	—	—
Hedging transactions								
EUR	(1)	(6)	(11)	—	—	—	—	—
USD	—	—	—	—	—	—	—	—
CHF	—	—	—	—	—	—	—	—
GBP	—	—	—	—	—	—	—	—
Balance sheet values								
Hedged items	—	—	—	40	1,636	—	—	—
Hedging transactions	—	—	—	—	—	262	456	—
Hedge result								47
Hedged items	—	—	—	—	—	—	—	(411)
Hedging transactions	—	—	—	—	—	—	—	458

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%).

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

(€ millions)

	2020	2019
Loans and receivables (performing)	(1)	5
Buy-backs of securities issued	(1)	1
Promissory notes (assets side)	(1)	7
Total	**(3)**	**13**

40 Net other expenses/income

(€ millions)

	2020	2019
Other income	843	1,066
Disposal of land and buildings	549	60
Rental income	72	139
Valuation/disposals of investment properties	44	444
Other	178	423
Other expenses	(240)	(324)
Disposal of land and buildings	—	—
Valuation/disposals of investment properties	(26)	(39)
Expenses of investment properties	(15)	(28)
Bank levy	(126)	(104)
Other	(73)	(153)
Total	**603**	**742**

Income from the disposal of land and buildings recognised in the reporting period is mainly from the sale of the “Am Tucherpark” site, which was completed at the beginning of 2020. The decline in rental income and the ongoing expenses for investment properties are attributable to the disposals made in 2019, as a result of which there has been a significant reduction in the investment property portfolio in 2020.

At year-end 2019, the valuation of investment properties was changed retrospectively to fair value measurement through profit or loss. In the context of the ongoing fair-value measurement, current valuation reports have been generated to determine the fair values of investment properties as at 31 December 2020. The fair value was measured through profit or loss on this basis. In the meantime, the reasons that resulted in a valuation discount at half-year 2020 (particularly greater uncertainty with regard to the short-term development in the summer/autumn of 2020), no longer apply.

In the previous year, the item “Other” included income of €242 million, while the item “Other” included expenses of €59 million in connection with the disposal of the BARD Offshore 1 wind farm.

Notes to the Income Statement (Continued)

Net other expenses/income attributable to related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	72	98
of which:		
UniCredit S. p. A.	16	19
sister companies	56	79
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**72**	**98**

41 Operating costs

(€ millions)

	2020	2019
Payroll costs	(1,451)	(1,453)
Wages and salaries	(1,151)	(1,168)
Social security costs	(178)	(175)
Expenses for pensions and similar employee benefits	(122)	(110)
Other administrative expenses	(1,231)	(1,220)
Amortisation, depreciation and impairment losses	(126)	(483)
on property, plant and equipment	(69)	(429)
on software and other intangible assets, excluding goodwill	(8)	(7)
on right-of-use assets (leases)	(49)	(47)
Total	**(2,808)**	**(3,156)**

In the reporting year, amortisation, depreciation and impairment losses on property, plant and equipment increased by €13 million compared with the previous-year period as the measurement basis for depreciation and impairment losses has increased due to the prospective transition of the valuation of owner-occupied property to the revaluation model at year-end 2019.

In the previous-year period, amortisation, depreciation and impairment losses on property, plant and equipment contains a write-down of €373 million on the wind farm, €58 million of which relate to scheduled depreciation and €315 million to an unscheduled write-down. The latter accrued in connection with the reclassification of the Offshore 1 wind farm to the item "Non-current assets or disposable groups held for sale".

Wages and salaries includes payments of €3 million (previous-year period: €4 million) made upon the termination of employment contracts. The expenses for similar payments under restructuring measures are recognised under restructuring costs in the income statement and explained in the Note "Restructuring costs".

Operating costs of related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	(611)	(613)
of which:		
UniCredit S. p. A.	(22)	(17)
sister companies	(589)	(596)
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**(611)**	**(613)**

Share-based payment compliant with IFRS 2
Share-based payments were granted primarily under the Group Incentive System in the reporting period. In addition, UniCredit has two further schemes under which shares are granted that are also accounted for in accordance with IFRS 2: the employee share ownership plan (Let's Share) and the Long-term Incentive Plans (LTI 2017–2019, LTI 2020–2023).

Group Incentive System
The Group Incentive System has governed variable compensation payable to selected employees since the 2010 financial year. This system is built around the principle that the variable compensation is granted partially in shares and scheduled for disbursement over a number of years.

Employees whose duties have a significant impact on the Bank's risk profile are beneficiaries of the Group Incentive System. Under the Group Incentive System, the bonus granted for the respective reporting period is split into a cash component and a share component. The cash component is accounted for in accordance with IAS 19, whereas the share component is compliant with IFRS 2.

The cash component is disbursed in tranches over a period of up to five years. Accordingly, this group of employees received 20% to 30% of the bonus for 2019 in cash with the commitment at the beginning of 2020, and a further 5% to 20% will be disbursed after financial year-end 2020, 2021, 2022 and 2024.

At the beginning of 2020, the beneficiaries received for the remaining bonus amount a commitment for an allocation of shares in UniCredit S. p. A. as part of the bonus for 2019, to be transferred to the beneficiaries after financial year-end 2020 to financial year-end 2024.

The deferred payment after financial year-end 2020, 2021, 2022 and 2024 and the allocation of shares after financial year-end 2020 to financial year-end 2024 to the beneficiaries is subject to the provision that, as part of a malus arrangement, it is ensured that no loss has been recorded at the level of UniCredit or at the level of the individual beneficiary, or a significant reduction in the results achieved. This deferring of the allocation therefore also determines the length of the vesting period of the individual tranches.

The fair value of the granted shares is calculated using the average stock market price of UniCredit S. p. A. shares in the month prior to the resolution by the Board of Directors in March 2020 regarding the granting, adjusted for a discount for expected dividends during the vesting period.

In the reporting period, 2.0 million UniCredit S. p. A. shares were committed as a component of the bonus granted for 2019, with a fair value of €22.8 million. If a capital measure is implemented after the grant date, the number of shares granted will be adjusted accordingly. The shares granted in 2020 as part of the bonus for 2019 will be transferred in 2021, 2022, 2023, 2024 and 2025.

The following table shows the fair values per share at the time of granting:

	2020
Fair value of the shares to be transferred in 2021 (€ per share)	12.353
Fair value of the shares to be transferred in 2022 (€ per share)	11.749
Fair value of the shares to be transferred in 2023 (€ per share)	11.132
Fair value of the shares to be transferred in 2024 (€ per share)	10.490
Fair value of the shares to be transferred in 2025 (€ per share)	9.529

The granted bonuses are recognised in the income statement on a pro rata basis over the respective vesting period.

Cash component bonuses for the 2020 financial year falling due for disbursement in 2021 are recognised in full as an expense. Where cash payments are made at a later date, such payments are subject to the condition that the eligible employees remain employed by UniCredit or partly subject to further performance targets. Accordingly, the vesting period for the promised bonus consists of several financial years (target achievement plus waiting period) and is to be deferred over this period compliant with IAS 19.153 in conjunction with IAS 19.68. Thus, deferred cash payments under the bonus promised for 2021 are recognised as expense in the respective period (starting with the 2020 financial year to the end of the financial year in which the waiting period for the respective tranche ends) on a pro rata basis.

UniCredit S.p.A. delivers shares to the employees for commitments made by HVB Group once the conditions for granting shares have been met. HVB Group reimburses to UniCredit S. p. A. the expenses accruing in this regard. The expense for the shares transferred corresponds to the fair value of the shares at the grant date.

Notes to the Income Statement (Continued)

Long-term Incentive Plans (LTI 2017–2019 and LTI 2020–2023
The performance period of the Long-term Incentive Plan 2017–2019 ended on 31 December 2019. A review showed that a degree of target attainment of 93.33% was achieved on the basis of the underlying performance criteria and the number of the conditionally granted shares was reduced accordingly.

As a result, a subsequent Long-term Incentive Plan (LTI 2020–2023) was introduced in the 2020 financial year. Analogously to the LTI 2017–2019 that had ended previously, the plan constitutes a component of the remuneration system in place at UniCredit for top management (Executive Vice Presidents and above) and key players at UniCredit Bank AG. This introduces a situation where a portion of the variable compensation of top management is not specified until after an assessment period of several years. The plan consists of a performance period of four years followed by a four-year retention period with an additional obligatory holding period. The grant is wholly based on shares of UniCredit S. p. A. The respective tranches are subject to malus terms and a claw back arrangement which makes it possible to reclaim each individual share tranche up to five years after vesting.

Altogether, 1.4 million UniCredit S. p. A. shares with a fair value of €12.0 million were conditionally granted for the first time in the reporting period as a component of the LTI 2020–2023. If a capital measure is carried out after the date of grant, the number of shares granted will be adjusted accordingly.

The fair value of the conditionally granted shares is calculated using the average stock market price of UniCredit S. p. A. shares in the month prior to the resolution by the Board of Directors in January 2020 regarding the granting, adjusted for a discount for expected dividends during the vesting period.

The decision on the scope to which these shares are actually granted is made at the end of the performance period, i. e. after the end of the 2023 financial year. UniCredit Bank AG bears the costs of implementation of the Long-term Incentive Plan within HVB.

	2020
Fair value of the shares to be transferred in 2025 (€ per share)	9.869
Fair value of the shares to be transferred in 2026 (€ per share)	8.920
Fair value of the shares to be transferred in 2027 (€ per share)	7.972
Fair value of the shares to be transferred in 2028 (€ per share)	7.028
Fair value of the shares to be transferred in 2029 (€ per share)	6.089

UniCredit S. p. A. delivers shares to the employees for commitments made by HVB Group once the conditions for granting shares have been met. HVB Group reimburses the expenses accruing in this regard to UniCredit S. p. A. The expense for the shares transferred corresponds to the fair value of the shares at the grant date.

Analysis of outstanding shares (Group Incentive System: LTI 2017–2019; LTI 2020–2023):

	2020		2019	
	TOTAL	AVERAGE MATURITY	TOTAL	AVERAGE MATURITY
Outstanding at start of period	**7,135,138**	**August 2021**	**6,451,681**	**September 2020**
Additions				
Newly granted shares	1,954,869	May 2022	2,643,322	April 2022
From corporate transfers	122,336	June 2021	42,424	September 2021
Conditionally granted shares	1,387,925	August 2026	10,350	July 2021
Releases				
Forfeited shares	123,107	May 2022	60,999	November 2021
Transferred shares	1,951,258	May 2020	1,608,422	May 2019
From corporate transfers	206,756	September 2022	283,117	May 2021
Expired shares	29,688	September 2026	60101	August 2021
Total at end of period	**8,289,459**	**January 2023**	**7,135,138**	**August 2021**

In the 2020 financial year, prorated expenses of €19 million (previous-year period: €28 million) accrued for the share component arising from the bonuses promised for 2014 to 2020 in the form of share-based payments compliant with IFRS 2. These expenses are recognised under payroll costs. The provision set up totalled €113 million (previous-year period: €119 million).

42 Credit impairment losses IFRS 9

(€ millions)

	2020	2019
Additions	(1,354)	(827)
Allowances for losses on loans and receivables at cost	(982)	(648)
Allowances for losses on loans and receivables at FVTOCI	(3)	—
Allowances for losses on guarantees and indemnities	(369)	(179)
Reversals	570	663
Allowances for losses on loans and receivables at cost	410	495
Allowances for losses on loans and receivables at FVTOCI	—	—
Allowances for losses on guarantees and indemnities	160	168
Gains/(losses) from non-substantial modification	2	1
Recoveries from write-offs of loans and receivables	49	48
Gains/(losses) on the disposal of impaired loans and receivables	—	—
Total	**(733)**	**(115)**

While credit impairment losses IFRS 9 came to €115 million in the previous-year period, thus also benefiting from the positive economic development in Germany in recent years, these rose sharply to €733 million in the reporting period. The increase is mainly attributable to a rise in additions to specific valuation allowances of €510 million in the reporting year compared with €71 million in the previous year and was largely influenced by the default of a few larger credit exposures, also against the backdrop of the COVID-19 pandemic. In addition, the increase in portfolio valuation allowances accounted for €223 million in the reporting year compared with €44 million in the previous year. Besides the adjustment of the assumptions used to reflect future economic conditions in the models for calculating the expected credit loss, the increase in the credit volume, which was allocated to Stage 2 and is thus subject to a value adjustment with an expected loss over the (residual) term instead of an expected twelve-month credit loss at Stage 1, also had an impact.

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)

	2020	2019
Non-consolidated affiliates	—	—
of which:		
UniCredit S. p. A.	—	—
sister companies	—	—
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**—**	**—**

43 Provisions for risks and charges

In the reporting period, net income from the reversal of provisions for risks and charges amounted to €11 million. The net income of €313 million from the reversal of provisions reported in the previous-year period is related to a settlement the Bank reached in April 2019 with the US and New York authorities to conclude the proceedings for violations of US financial sanctions in the period from 2002 to 2012. Since the amounts payable according to the settlement were lower than the provisions set up for it in the previous years, it was possible to reverse the excess last year.

Notes to the Income Statement (Continued)

44 Restructuring costs
Restructuring costs of €35 million were incurred in the reporting year, which are primarily based on the increase in the restructuring provisions in 2019. In the previous year, net restructuring costs of €363 million arose in the course of implementing the four-year Team 23 strategic plan. This amount includes expenses for the setting aside of restructuring provisions in connection with measures to boost efficiency and earnings in the multi-year plan 2020-2023 (see the section entitled “Team 23” in this Management’s Discussion and Analysis). By contrast, the restructuring provision set aside in the years prior to 2019 and the residual amount of the provision for Transform 2019 were reversed in this item and recognised as income. These provisions essentially cover the provisioning requirements for early retirement or severance payments.

45 Net gains/losses on disposals of investments

(€ millions)

	2020	2019
Shares in affiliates	(1)	(28)
Disposal of companies accounted for using the equity method	—	16
Write-downs	(3)	(3)
Total	**(4)**	**(15)**

In the reporting year, the depreciation and write-downs relate to Comtrade Group B. V., an associate accounted for using the equity method, which generated a significantly higher profit in the reporting period due to the sale of a division. This profit was recognised under dividends and other income from equity investments. After the dividend payout, it was necessary to write down the associate to the carrying amount.

In the previous year, income from the sale of shares in affiliates includes the losses on the sale of the subsidiary Ocean Breeze Energy GmbH & Co. KG in the amount of €23 million and on the sale of shares in the subsidiary AGROB Immobilien AG in the amount of €8 million. In this regard, it should be noted that until the time of transfer of the shares to the purchaser, the income and expenses of both subsidiaries are recognised under the respective items in the income statement. For instance, in the previous year an unscheduled write-down is recognised, among others, under the item “Operating costs” for the wind farm held by the subsidiary Ocean Breeze Energy GmbH & Co. KG, while the investment properties held by the subsidiary AGROB Immobilien AG are recognised at fair value through profit or loss and the valuation gains or losses arising therefrom are included in the item “Net other expenses/income” in the previous year.

In the previous year, the disposals of companies accounted for using the equity method include the gain of €15 million on the sale of the associate SwanCap Partners GmbH, Munich.

46 Impairment on goodwill
There was no impairment of goodwill in the reporting period. In the previous-year period, the remaining goodwill of €130 million was completely written off for the Commercial Banking business segment.

47 Income tax for the period

(€ millions)

	2020	2019
Current taxes	(325)	(451)
Deferred taxes	(79)	(82)
Total	**(404)**	**(533)**

The current tax expense for the reporting period includes income totalling €87 million for previous years (previous-year period: €54 million).

The deferred tax expense in the reporting period contains income totalling €40 million arising from value adjustments to deferred tax assets on tax losses carried forward and temporary differences. This was offset by deferred tax expense of €119 million resulting overall from the occurrence and reversal of temporary differences and the utilisation of tax losses. The deferred tax expense of the previous year was adjusted due to the change in recognition in the value adjustments to deferred taxes. This arises from income from the value adjustment to deferred tax assets on tax losses carried forward and temporary differences as well as an expense arising from the occurrence and reversal of temporary differences and the utilisation of tax losses. For further details, please refer to the Note "Consistency".

The differences between computed and recognised income tax are shown in the following reconciliation:

(€ millions)

	2020	2019
Profit before tax	1,072	1,361
Applicable tax rate	31.8%	31.4%
Computed income taxes	(340)	(427)
Tax effects		
arising from previous years and changes in tax rates	(19)	(7)
arising from foreign income	—	24
arising from non-taxable income	14	25
arising from different tax laws	(11)	1
arising from non-deductible expenses	(86)	(165)
arising from value adjustments and the non-recognition of deferred taxes	40	56
arising from amortisation of goodwill	—	(41)
arising from other differences	(2)	1
Recognised income taxes	**(404)**	**(533)**

The tax reconciliation 2019 was increased by €18 million to €56 million on account of the retrospective change in recognition of the item "arising from value adjustments and the non-recognition of deferred taxes" mentioned above.

An applicable tax rate of 31.76% (previous-year period: 31.4%) has been assumed in the tax reconciliation. This comprises the current rate of corporate income tax in Germany of 15.0%, the solidarity surcharge of 5.5% and an average trade tax rate of 15.93% (previous-year period: 15.6%). This reflects the fact that the consolidated profit is dominated by profits generated in Germany, meaning that it is subject to German corporate income tax and trade tax.

Notes to the Income Statement (Continued)

The effects arising from tax on foreign income are in particular a result of different tax rates applicable in other countries.

The item “Tax effects arising from different tax laws” comprises the municipal trade tax modifications applicable to domestic companies and other local peculiarities.

The deferred tax assets and deferred tax liabilities are allocated to the following items:

(€ millions)

	2020	2019
Deferred tax assets		
Other financial instruments at FVTPL	113	313
Financial instruments at FVTOCI	3	5
Loans and receivables with banks (at cost) and customers (at cost)/Deposits from banks/customers	133	93
Hedging derivatives and hedge adjustment of hedged items (P&L)	377	340
Property, plant and equipment/intangible assets	112	107
Other assets/other liabilities	83	59
Provisions, pension fund and similar	706	719
Losses carried forward/tax credits	65	115
Other	3	3
Total deferred tax assets	**1,595**	**1,754**
Offsetting effect	(652)	(673)
Recognised deferred tax assets	**943**	**1,081**
Deferred tax liabilities		
Other financial instruments at FVTPL	194	216
Financial instruments at FVTOCI	17	11
Loans and receivables with banks (at cost) and customers (at cost)/Deposits from banks/customers	5	18
Hedging derivatives and hedge adjustment of hedged items (P&L)	293	290
Hedging derivatives and hedge adjustment of hedged items (OCI)	6	9
Property, plant and equipment/intangible assets	490	566
Other assets/other liabilities	67	73
Other	16	4
Total deferred tax liabilities	**1,088**	**1,187**
Offsetting effect	(652)	(673)
Recognised deferred tax liabilities	**436**	**514**

As a result of the retrospective change in recognition of value adjustments to deferred taxes, there was a change in the amount of the deferred tax assets of the previous year relating to the respective balance sheet items, with the exception of those relating to losses carried forward, tax credits and other. The amount of deferred tax assets in 2019 remained unchanged overall.

Deferred taxes are normally measured using the local tax rates of the respective tax jurisdiction. German corporations use the uniform corporate income tax rate including the solidarity surcharge of 15.8% that is not dependent on any dividend distribution and the municipal trade tax rate dependent on the applicable municipal trade tax multiplier. Compared with the previous year, this resulted in a change in the overall valuation rate for deferred taxes from 31.4% to 31.76% for HVB in Germany. The applicable local tax rates are applied analogously for other domestic and foreign units. Changes in tax rates have been taken into account, provided they had already been enacted by the end of the reporting period.

All in all, deferred tax assets of €217 million (previous-year period: €199 million) were recorded directly in equity. On the one hand, these mainly arise from deferred tax assets of €651 million (previous-year period: €611 million) in connection with the accounting for pension commitments in accordance with IAS 19, which are included in the aforementioned item "Provisions, pension fund and similar" and have been offset against reserves. On the other hand, they are the result of deferred tax liabilities of €422 million in connection with the valuation of real estate in accordance with IAS 16.31 and are recognised in the aforementioned item "Property, plant and equipment/intangible assets". Further deferred taxes are listed separately in the aforementioned items "Financial instruments at FVTOCI" and "Hedging derivatives and hedge adjustment of hedged items in the portfolio fair value hedge (OCI)".

In the 2020 financial year, value adjustments to deferred taxes of €112 million (€4 million of which relates to foreign branches) are recognised in the income statement, while value adjustments to deferred taxes of €179 million are made in other comprehensive income.

Compliant with IAS 12, no deferred tax assets have been recognised for further corporate tax losses carried forward of HVB Group of €916 million (previous-year period: €919 million), most of which do not expire, and trade tax carried forward of €1,130 million (previous year period: €1,095 million), as well as for deductible temporary differences of €920 million (previous-year period: €948 million).

The deferred tax assets were calculated using plans of the individual business segments, which are based on segment-specific and general macroeconomic assumptions. The amounts were measured taking into account appropriate valuation discounts. The planning horizon remained unchanged at five years. Measurement was carried out taking into account possible restrictions of local regulations regarding timing and any rules on minimum taxation for tax losses carried forward. Estimation uncertainties are inherent in the assumptions used in any multi-year plan. Where changes are made to the multi-year plan over time, this may have an impact on the valuation of the volume of deferred tax assets already capitalised or to be capitalised.

48 Earnings per share

	2020	2019
Consolidated profit attributable to the shareholder (€ millions)	668	811
Average number of shares	802,383,672	802,383,672
Earnings per share (€) (undiluted and diluted)	0.83	1.01

Notes to the Balance Sheet

49 Cash and cash balances

(€ millions)

	2020	2019
Cash on hand	6,020	6,044
Balances with central banks	41,511	20,171
Total	**47,531**	**26,215**

50 Financial assets held for trading

(€ millions)

	2020	2019
Balance-sheet financial instruments	26,353	22,966
Fixed-income securities	6,799	7,958
Equity instruments	6,559	5,641
Other financial assets held for trading	12,995	9,367
Positive fair value from derivative financial instruments	56,352	46,887
Total	**82,705**	**69,853**
of which: subordinated assets	4	135

Financial assets held for trading include in particular securities held for trading purposes and the positive fair values of derivatives other than hedging derivatives that are disclosed in hedge accounting (shown separately in the balance sheet). Provided they are held for trading purposes, other financial instruments such as receivables from repurchase transactions, promissory notes and registered bonds are additionally carried as other financial assets held for trading within financial assets held for trading.

Financial assets held for trading of related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	16,897	12,538
of which:		
UniCredit S.p.A.	12,564	8,541
sister companies[1]	4,333	3,997
Joint ventures	—	147
Associates	86	39
Other investees	3	5
Total	**16,986**	**12,729**

1 Mostly derivative transactions involving UniCredit Bank Austria AG.

51 Financial assets at FVTPL

(€ millions)

	2020	2019
Fixed-income securities	10,295	13,359
Equity instruments	122	283
Loans and promissory notes	973	1,757
Other	54	75
Total	**11,444**	**15,474**
of which:		
subordinated loans and receivables	23	32
past-due loans and receivables	1	1

52 Financial assets at FVTOCI

(€ millions)

	2020	2019
Fixed-income securities	12,471	14,673
Total	**12,471**	**14,673**

Changes in carrying amounts

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
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**
Balance at 1/1/2019	**7,370**	**—**	**—**	**—**	**7,370**
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]	7,303	—	—	—	7,303
Derecognition (due to incollectibility)	—	—	—	—	—
Other changes	—	—	—	—	—
Balance at 31/12/2019	**14,673**	**—**	**—**	**—**	**14,673**

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

Notes to the Balance Sheet (Continued)

Fixed-income securities and collateral, broken down by rating class (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
31/12/2020					
Not rated	508	—	—	—	508
Rating class 1-4	11,913	—	—	—	11,913
Rating class 5-8	—	50	—	—	50
Rating class 9-10	—	—	—	—	—
Fair value at 31/12/2020	**12,421**	**50**	**—**	**—**	**12,471**
Impairment recognised					
in the OCI for these instruments	—	3	—	—	3
31/12/2019					
Not rated	403	—	—	—	403
Rating class 1-4	14,270	—	—	—	14,270
Rating class 5-8	—	—	—	—	—
Rating class 9-10	—	—	—	—	—
Fair value at 31/12/2019	**14,673**	**—**	**—**	**—**	**14,673**
Impairment recognised					
in the OCI for these instruments	—	—	—	—	—

The amount or the change in impairment of the securities holdings is €3 million (previous year: lower than €0.5 million in each case).

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.

53 Loans and receivables with banks (at cost)

(€ millions)

	2020	2019
Current accounts	1,419	2,539
Cash collateral and pledged credit balances	8,295	8,203
Reverse repos	19,189	15,278
Securities	1,929	915
Other loans to banks	3,141	4,907
Non-performing loans and receivables	—	—
Total	**33,973**	**31,842**
of which subordinated assets	—	—

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

Changes in gross carrying amounts (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance 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 not recognised in profit or loss	—	—	—	—	—
Changes due to modifications of assets					
not leading to derecognition	—	—	—	—	—
Disposals	(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**
Balance at 1/1/2019	**33,191**	**464**	**40**	**—**	**33,695**
Change in carrying amount within the stage					
(including additions from new business and disposals)	(1,362)	(446)	(39)	—	(1,847)
Transfers to another stage due to					
deterioration in credit quality	(34)	34	—	—	—
from Stage 1 to Stage 2	(34)	34	—	—	—
from Stage 2 to Stage 3	—	—	—	—	—
from Stage 1 to Stage 3	—	—	—	—	—
Transfers to another stage due to					
improvement in credit quality	14	(14)	—	—	—
from Stage 2 to Stage 1	14	(14)	—	—	—
from Stage 3 to Stage 2	—	—	—	—	—
from Stage 3 to Stage 1	—	—	—	—	—
Increase reported directly in equity in gross carrying					
amounts for interest claims not recognised in profit or loss	—	—	—	—	—
Changes due to modifications of assets					
not leading to derecognition	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 31/12/2019	**31,809**	**38**	**1**	**—**	**31,848**

Notes to the Balance Sheet (Continued)

Changes in allowances (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
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 recognised 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**
Balance at 1/1/2019	**6**	**1**	**40**	**—**	**47**
Addition due to new business	6	—	—	—	6
Change in carrying amount within the same stage (netted)[1]	(2)	—	—	—	(2)
Increase in impairment reported directly in equity for					
interest claims not recognised in profit or loss	—	—	—	—	—
Changes due to modification of assets					
not leading to derecognition	—	—	—	—	—
Disposals (reversal due to disposal of receivable)	(5)	(1)	—	—	(6)
Disposals (utilisation of impairments)	—	—	(40)	—	(40)
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 31/12/2019	**5**	**—**	**1**	**—**	**6**

1 Transfers between the individual stages are also shown here (disposal at the previous stage, addition at the new stage).

Breakdown by rating class (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	COLLATERAL	TOTAL
31/12/2020						
Not rated	272	—	—	—	—	272
Rating class 1–4	33,010	1	—	—	19,145	33,011
Rating class 5–8	688	4	—	—	101	692
Rating class 9–10	—	—	1	—	—	1
Gross carrying amount at 31/12/2020	**33,970**	**5**	**1**	**—**	**19,246**	**33,976**
Impairment	(2)	—	(1)	—	—	(3)
Net carrying amount at 31/12/2020	**33,968**	**5**	**—**	**—**	**19,246**	**33,973**
31/12/2019						
Not rated	1,133	—	—	—	—	1,133
Rating class 1–4	29,037	7	—	—	15,155	29,044
Rating class 5–8	1,639	31	—	—	301	1,670
Rating class 9–10	—	—	1	—	—	1
Gross carrying amount at 31/12/2019	**31,809**	**38**	**1**	**—**	**15,456**	**31,848**
Impairment	(5)	—	(1)	—	—	(6)
Net carrying amount at 31/12/2019	**31,804**	**38**	**—**	**—**	**15,456**	**31,842**

There were no assets written off in the reporting period that are subject to an enforcement measure.

Loans and receivables with related parties

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

	2020	2019
Non-consolidated affiliates	11,044	2,336
of which:		
UniCredit S.p.A.	10,226	1,515
sister companies[1]	818	821
Joint ventures	—	36
Associates	17	8
Other investees	7	6
Total	**11,068**	**2,386**

1 Mainly due from UniCredit Bank Austria AG.

Notes to the Balance Sheet (Continued)

54 Loans and receivables with customers (at cost)

(€ millions)

	2020	2019
Current accounts	5,307	7,154
Cash collateral and pledged cash balances	3,279	2,770
Reverse repos	4,877	3,685
Mortgage loans	49,947	48,967
Finance leases	1,561	1,767
Securities	19,405	13,221
of which asset-backed securities (ABS)	11,716	10,216
Other loans and receivables	57,871	60,853
Non-performing loans and receivables	2,000	1,215
Total	**144,247**	**139,632**
of which: subordinated assets	4	103

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 €5,087 million (previous year: €4,887 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 to support the real economy, in particular moratoria as well as loans with government guarantees.

HVB has supported its customers with statutory consumer moratoria and also with moratoria for its corporate customers. The carrying amount of the underlying loans totalled around €650 million at 30 June 2020. The deferral period of statutory moratoria and the moratoria for non-consumers ended on 30 June 2020. Longer deferral periods apply to selected products, in particular to residential mortgage loans under KfW programmes. In this case, the deferral periods extend over a period of nine months and will have almost completely expired at year-end 2020. No new moratoria will be granted. The moratoria normally lead to an extension of the loan term. The deferred contractually agreed debt interest is calculated and must be repaid by the customers at the end of the loan term or when conditions are adjusted. As at 31 December 2020, the volume of loans for which a moratorium was agreed amounted to €6 million.

In the context of the financial impact of the COVID-19 crisis, 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. 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 €1.2 billion at 31 December 2020. The volume of the fast loans drawn amounted to an additional €0.3 billion, which are treated as trust loans and are not recognised. The total volume of committed loans under the programmes is significantly higher and depending on the programme, different deadlines apply for the drawdown of funds by borrowers. These special programmes will also continue in 2021 and are still a very important instrument for supporting HVB customers affected by the COVID-19 pandemic.

Changes in gross carrying amounts (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
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	—	—
Transfers 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 modifications of assets					
not leading to derecognition	—	—	—	—	—
Disposals	(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**
Balance at 1/1/2019	**124,753**	**7,915**	**2,984**	**—**	**135,652**
Change in carrying amount within the stage					
(including additions from new business and disposals)	9,217	(2,173)	(1,313)	—	5,731
Transfers to another stage due to					
deterioration in credit quality	(8,318)	7,297	1,021	—	—
from Stage 1 to Stage 2	(7,444)	7,444	—	—	—
from Stage 2 to Stage 3	—	(147)	147	—	—
from Stage 1 to Stage 3	(874)	—	874	—	—
Transfer to another stage due to					
improvement in credit quality	2,081	(1,979)	(102)	—	—
from Stage 2 to Stage 1	2,031	(2,031)	—	—	—
from Stage 3 to Stage 2	—	52	(52)	—	—
from Stage 3 to Stage 1	50	—	(50)	—	—
Increase reported directly in equity in gross carrying amounts					
for interest claims not recognised in profit or loss	—	—	79	—	79
Changes due to modifications of assets					
not leading to derecognition	—	—	—	—	—
Foreign currency movements					
and other changes	—	—	—	—	—
Balance at 31/12/2019	**127,733**	**11,060**	**2,669**	**—**	**141,462**

Notes to the Balance Sheet (Continued)

Changes in impairments

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
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**
Balance at 1/1/2019	**139**	**187**	**1,620**	**—**	**1,946**
Addition due to new business	72	—	—	—	72
Change in carrying amount within the same stage (netted)[1]	(31)	91	300	—	360
Increase in impairment reported directly in equity for					
interest claims not recognised in profit or loss	—	—	79	—	79
Changes due to modification of assets					
not leading to derecognition	—	—	1	—	1
Disposals (reversal due to disposal of receivables)	(40)	(40)	(271)	—	(351)
Disposals (utilisation of impairments)	—	—	(253)	—	(253)
Reversal of the discounted amount and recognition of					
interest claims not previously recognised in profit or loss	—	—	(29)	—	(29)
Foreign currency movements and other changes	(1)	(1)	7	—	5
Balance at 31/12/2019	**139**	**237**	**1,454**	**—**	**1,830**

1 Transfers between the individual stages are also shown here (disposal at the previous stage, addition at the new stage).

Portfolio valuation allowances (Stage 1 and Stage 2) have increased over the year. This is attributable to rating adjustments, which individually reflect the economic change of customers in the reporting year. In addition, a higher number of customers transferred from Stage 1 to Stage 2 compared with the previous year which means that the transfer from an expected 12-month credit loss in Stage 1 to a loss expected over the (residual) term to maturity in Stage 2 also contributed to an increase in portfolio valuation allowances. It should be noted in this connection that a significant, relative change can already trigger a transfer to Stage 2, even if this relative change is made within good rating classes. HVB did not make use of the option to assume for the lending business that no significant increase in the credit default risk has occurred for debt instruments with a low credit default risk. On the other hand, adjustments to model parameters contributed to a higher portfolio valuation allowance, such as the adaptations made to forward-looking information. The effects of the adjustments made to model parameters cannot be determined separately and are included in the changes in valuation allowances shown.

Breakdown by rating class

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	COLLATERAL	TOTAL
31/12/2020						
Not rated	11,298	204	—	—	1,063	11,502
Rating class 1-4	98,981	3,593	—	—	43,527	102,574
Rating class 5-8	9,624	19,106	—	—	15,335	28,730
Rating class 9-10	—	—	3,324	27	942	3,351
Gross carrying amount at 31/12/2020	**119,903**	**22,903**	**3,324**	**27**	**60,867**	**146,157**
Impairment	(112)	(447)	(1,351)	—	—	(1,910)
Net carrying amount at 31/12/2020	**119,791**	**22,456**	**1,973**	**27**	**60,867**	**144,247**
31/12/2019						
Not rated	11,384	15	4	—	750	11,403
Rating class 1-4	94,048	2,837	—	—	42,690	96,885
Rating class 5-8	22,301	8,208	3	—	16,680	30,512
Rating class 9-10	—	—	2,662	—	493	2,662
Gross carrying amount at 31/12/2019	**127,733**	**11,060**	**2,669**	**—**	**60,613**	**141,462**
Impairment	(139)	(237)	(1,454)	—	—	(1,830)
Net carrying amount at 31/12/2019	**127,594**	**10,823**	**1,215**	**—**	**60,613**	**139,632**

The amount outstanding from assets written off in the reporting period which are subject to an enforcement measure totals €348 million (previous year: €325 million).

Loans and receivables with related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	42	4
of which:		
sister companies	41	2
subsidiaries	1	2
Joint ventures	—	11
Associates	51	45
Other investees	382	422
Total	**475**	**482**

Amounts receivable from customers under lease agreements (receivables under finance leases)

The amounts receivable under finance lease agreements contained in the item "Loans and receivables with customers (at cost)" are described in more detail in the Note "Information regarding lease operations".

Notes to the Balance Sheet (Continued)

55 Forbearance

The European Banking Authority (EBA) defines forborne exposures as debt contracts in respect of which forbearance measures have been extended. Forbearance measures consist of concessions towards a debtor facing or about to face difficulties in meeting its financial commitments that the lender would not have been prepared to grant under other circumstances. Possible measures range from deferrals and temporary moratoriums, longer periods allowed for repayment, reduced interest rates and rescheduling, and even partial debt forgiveness. It should be noted, however, that not every modification of a lending agreement is due to financial difficulties on the part of the borrower and represents forbearance.

Forborne exposures may be classified as performing or non-performing under the EBA definition. The non-performing portfolio encompasses exposures for which the counterparty is listed at Stage 3 and exposures that do not yet satisfy the EBA's strict criteria for returning to the performing portfolio. The following table shows the breakdown of the forborne exposure portfolio at the reporting date:

(€ millions)

	2020			2019		
	CARRYING AMOUNT BEFORE ALLOWANCES	ALLOWANCES	CARRYING AMOUNT	CARRYING AMOUNT BEFORE ALLOWANCES	ALLOWANCES	CARRYING AMOUNT
Performing exposures	161	(3)	158	414	(4)	410
Non-performing exposures	1,433	(550)	883	1,493	(831)	662
Total	**1,594**	**(553)**	**1,041**	**1,907**	**(835)**	**1,072**

An amount of €1,041 million is carried as forborne exposures under "Loans and receivables with customers (at cost)" (previous year: €1,072 million). No forborne exposures are contained in the "Loans and receivables with banks (at cost)", as was the case in the previous year. No securities with forbearance measures were held at the reporting date, as was the case in the previous year.

If allowances have not already been set up for forborne exposures, the loans involved are exposed to increased default risk as they have already become conspicuous. They are thus allocated to Stage 2. Such exposures are closely tracked by the restructuring units or subject to strict monitoring by the back-office units.

56 Hedging derivatives

(€ millions)

	2020	2019
Micro fair value hedge	7	2
Portfolio fair value hedge[1]	365	262
Total	**372**	**264**

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

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

(€ millions)

	2020	2019
Associates accounted for using the equity method	11	10
of which: goodwill	—	—
Joint ventures accounted for using the equity method	—	—
Total	**11**	**10**

For materiality reasons, two joint ventures and two associates were not accounted for using the equity method in the consolidated financial statements.

Change in portfolio of investments in associates accounted for using the equity method

(€ millions)

	ASSOCIATES ACCOUNTED FOR USING THE EQUITY METHOD	
	2020	2019
Carrying amounts at 1/1	**10**	**23**
Additions	4	1
Purchases[1]	—	—
Write-ups	—	—
Changes from currency translation	—	—
Other additions[2]	4	1
Disposals	(3)	(14)
Sales	—	(9)
Impairments	(3)	(3)
Changes from currency translation	—	(2)
Non-current assets or disposal groups held for sale	—	—
Other disposals[2]	—	—
Carrying amounts at 31/12	**11**	**10**

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

Comtrade Group B.V., Rotterdam, a company accounted for using the equity method, generated a profit from the sale of a division in the reporting year.

The following table shows in aggregate form the main items in the income statements of the companies accounted for using the equity method:

(€ millions)

	2020	2019
Net interest	(1)	(2)
Net gains/(losses) on financial assets and liabilities at fair value	—	—
Net other expenses/income	72	85
Operating costs	(61)	(75)
Net gains/(losses) on disposals of investments	46	—
Profit/(loss) before tax	**56**	**8**
Income tax	(2)	(2)
Consolidated profit/(loss)	**54**	**6**
Other comprehensive income (OCI)	**7**	**—**
Total comprehensive income	**61**	**6**

Effects of changes in value from OCI and other equity items at companies accounted for using the equity method totalled a prorated amount of €1 million (previous year: €– million). There was no prorated loss during the reporting period or the previous year from companies accounted for using the equity method. Furthermore, there were no prorated cumulative losses in the reporting period or the previous year from companies accounted for using the equity method.

There are no material commitments arising from contingent liabilities of associates.

Notes to the Balance Sheet (Continued)

58 Property, plant and equipment

(€ millions)

	2020	2019
Land	1,045	951
Buildings	947	964
Plant and office equipment	263	307
Right-of-use assets (leases)	270	285
of which: land and buildings	260	273
Other property, plant and equipment	—	—
Total	**2,525**	**2,507**

At year-end 2019, the measurement of the land and buildings used by the Bank itself that are shown under property, plant and equipment was changed prospectively to the revaluation model. Consequently, the revaluation is to be reviewed at the reporting date to ensure that the carrying amount does not deviate significantly from the fair value of the land and buildings. To this end, current valuation reports were prepared to determine the fair values of the owner-occupied real estate as at 31 December 2020. The revaluation was carried out on this basis. In the meantime, the reasons that resulted in a valuation discount at half-year 2020 (particularly greater uncertainty with regard to the short-term development in the summer/autumn of 2020), no longer apply.

Changes in property, plant and equipment **(in Mio €)**

	LAND	BUIL-DINGS	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**
Acquisition costs at 1/1/2019	**178**	**1,873**	**890**	**341**	**3,282**	**1,735**	**5,017**
Write-downs and write-ups from previous years	—	(1,129)	(561)	(18)	(1,708)	(497)	(2,205)
Carrying amounts at 1/1/2019	**178**	**744**	**329**	**323**	**1,574**	**1,238**	**2,812**
Additions							
Acquisition/production costs	—	24	30	32	86	3	89
Write-ups	1	7	—	—	8	—	8
Changes from currency translation	—	—	—	—	—	—	—
Other additions[2]	5	1	3	6	15	—	15
Disposals							
Sales	(1)	—	(6)	—	(7)	—	(7)
Depreciation and write-downs	—	(27)	(45)	(47)	(119)	(58)	(177)
Impairments	—	—	(4)	(6)	(10)	(259)	(269)
Changes from currency translation	—	—	—	(1)	(1)	—	(1)
Non-current assets or disposal groups held for sale	(62)	(152)	—	(16)	(230)	(924)	(1,154)
Other disposals[2]	—	(20)	—	(6)	(26)	—	(26)
Carrying amount at 31/12/2019 (measurement at amortised cost)	**121**	**577**	**307**	**285**	**1,290**	**—**	**1,290**
Effects from revaluation compliant with IAS 16	830	387	—	—	1,217	—	1,217
Carrying amounts at 31/12/2019	**951**	**964**	**307**	**285**	**2,507**	—	**2,507**
Write-downs and write-ups from previous years plus the reporting year, adjusted for revaluation effects	(830)	499	554	67	290	—	290
Acquisition costs at 31/12/2019	**121**	**1,463**	**861**	**352**	**2,797**	**—**	**2,797**

1 Including leased assets. More information about leases is contained in Note "Information regarding lease operations".
2 Including changes in the group of companies included in consolidation.

Notes to the Balance Sheet (Continued)

59 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 €67 million at the reporting date (previous year: €61 million).

Changes in investment properties (€ millions)

	2020	2019
Carrying amounts at 1/1	**353**	**563**
Additions		
Acquisitions	29	—
Valuation gains	43	109
Subsequent expenses	—	—
Changes from currency translation	—	—
Other additions[1]	1	16
Disposals		
Sales	(2)	(13)
Valuation losses	(26)	(39)
Changes from currency translation	—	—
Non-current assets or disposal groups held for sale	(46)	(94)
Other disposals[1]	—	(189)
Carrying amounts at 31/12	**352**	**353**

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

60 Intangible assets

(€ millions)

	2020	2019
Goodwill	—	—
Other intangible assets	8	15
Internally generated intangible assets	6	9
Other intangible assets	2	6
Total	**8**	**15**

Changes in intangible assets

(€ millions)

	GOODWILL FROM AFFILIATES		INTERNALLY GENERATED INTANGIBLE ASSETS		OTHER INTANGIBLE ASSETS	
	2020	2019	2020	2019	2020	2019
Acquisition costs at 1/1	**—**	**1,042**	**389**	**387**	**178**	**183**
Write-downs and write-ups from previous years	—	(912)	(380)	(375)	(172)	(176)
Carrying amounts at 1/1	**—**	**130**	**9**	**12**	**6**	**7**
Additions						
Purchases/in-house production costs	—	—	2	2	3	2
Write-ups	—	—	—	—	—	—
Changes from currency translation	—	—	—	—	—	—
Other additions	—	—	—	—	—	—
Disposals						
Sales	—	—	—	—	—	—
Amortisation and write-downs	—	—	(5)	(5)	(3)	(3)
Impairments	—	(130)	—	—	—	—
Changes from currency translation	—	—	—	—	—	—
Non-current assets or disposal groups held for sale	—	—	—	—	(3)	—
Other disposals[1]	—	—	—	—	(1)	—
Carrying amounts at 31/12	**—**	**—**	**6**	**9**	**2**	**6**
Write-downs and write-ups from previous years plus the reporting year	—	1,042	385	380	163	172
Acquisition costs at 31/12	**—**	**1,042**	**391**	**389**	**165**	**178**

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

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)

61 Non-current assets or disposal groups held for sale

(€ millions)

	2020	2019
Cash and cash balances	—	—
Financial assets at FVTPL	179	—
Financial assets at FVTOCI	—	—
Loans and receivables with banks (at cost)	9	—
Loans and receivables with customers (at cost)	188	—
Investments in associates and joint ventures accounted for using the equity method	—	—
Property, plant and equipment	2	215
Investment properties	47	229
Intangible assets	3	—
Tax assets	12	—
Inventories (IAS 2)	292	—
Other assets	46	—
Total	**778**	**444**

As at 31 December 2020, non-current assets or disposal groups held for sale include three non-strategic real estate properties (investment properties) totalling €24 million, the sale of which is planned in the first half of 2021. The remaining non-current assets or disposal groups held for sale are related to the sale of the subsidiary Wealth Management Capital Holding GmbH, Munich planned in the second half of 2021. HVB has decided to sell the Wealthcap Group that deals with the management of real estate funds in a broader sense. This is in line with the strategic orientation of concentrating on the Bank's core business and the Bank divesting itself of investments in product providers, e.g. in the area of closed-end funds. 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. Almost all of the assets reported under this item as at 31 December 2020 were classified as non-current assets or disposal groups held for sale in the second half of 2020.

In the first half of 2020, all the assets classified at year-end 2019 as non-current assets or disposal groups held for sale (mostly the "Am Tucherpark" real estate complex) were sold apart from one investment property. The remaining investment property (allocated to Level 2) with a carrying amount of €2 million was sold with effect from 1 January 2021.

The investment properties (allocated to Level 2) with a carrying amount of €1 million and property, plant and equipment with a carrying amount of €1 million newly classified in the first half of 2020 as non-current assets or disposal groups held for sale were sold in the second half of 2020.

No impairments were required to be recognised in connection with non-current assets or disposal groups held for sale as at 31 December 2020. In the previous year, impairments of €317 million were taken that related almost exclusively to the BARD Offshore 1 wind farm.

Changes in investment properties, classified as non-current assets and disposal groups held for sale:

(€ millions)

	2020	2019
Carrying amounts at 1/1	**229**	**1,100**
Additions		
Purchases	—	—
Valuation gains	—	295
Subsequent expenses	—	—
Changes from currency translation	—	—
Other additions[1]	46	93
Disposals		
Sales	(228)	(1,259)
Valuation losses	—	—
Changes from currency translation	—	—
Non-current assets or disposal groups held for sale	—	—
Other disposals[1]	—	—
Carrying amounts at 31/12	**47**	**229**

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

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)	
	2020	2019	2020	2019
Investment properties, classified as non-current assets				
or disposal groups held for sale	24	229	23	—

Changes in investment properties allocated to Level 3: **(€ millions)**

	2020	2019
Carrying amount at 1/1	**—**	**685**
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	—	(685)
Carrying amount at 31/12	**23**	**—**

Reclassification from Level 3 to Level 2 concerns properties for which the fair value is not determined on the basis of external valuation reports but on the basis of binding or reliable non-binding offers received in the course of the selling process. The investment properties reclassified in the previous year from Level 3 to Level 2 were sold at the end of 2019 and the start of 2020.

There were no reclassifications from Level 2 to Level 3.

Notes to the Balance Sheet (Continued)

62 Other assets

Other assets include prepaid expenses of €123 million (previous year: €124 million).

In the previous year, this item included real estate of €388 million. Real estate is purchased by the Wealthcap group belonging to HVB in order to either transfer it to funds and place the fund units with investors or sell it directly to institutional investors. These assets are recognised at cost. There are no reasons for a write-down to lower disposal proceeds. On account of the classification of the Wealthcap group as "Non-current assets or disposal groups held for sale", the real estate is recognised under this item as at 31 December 2020.

63 Own securitisation

The Bank has securitised its own loan receivables for the purpose of obtaining favourable funding terms on the capital market and generating securities for use as collateral in repurchase agreements.

This involves structuring the cash flows of the underlying loan portfolio, meaning that at least two hierarchical positions (tranches) are formed when dividing up the risks and cash flows. In the case of traditional securitisations (true sale), receivables are sold to a special purpose entity, which in turn issues securities.

The Bank's true sale transactions consist of Rosenkavalier 2008 (€3.2 billion securitisation of retail real estate loans), Rosenkavalier 2015 (€3.5 billion securitisation of corporate loans) and Geldilux 2015 (€2.1 billion securitisation of corporate loans of the Luxembourg branch). In the reporting year, Rosenkavalier 2020 (€0.8 billion) was set up as a new transaction, which securitised KomfortKredit loans to continue supporting the Bank's liquidity in the pandemic crisis.

In all of the transactions, HVB retained the tranches issued by the special purpose entities. The senior positions (or senior tranches) of securities generated in this way are available as collateral for repurchase agreements with the Bundesbank and as collateral for TLTRO III. The underlying receivables continue to be recognised by HVB and the special purpose entities set up for this purpose are fully consolidated in accordance with IFRS 10. The risk-weighted assets have not been reduced.

64 Deposits from banks

(€ millions)

	2020	2019
Deposits from central banks	28,333	17,562
Deposits from banks	45,174	52,759
Current accounts	2,088	3,095
Cash collateral and pledged credit balances	9,964	8,074
Repos	15,987	21,786
Term deposits	2,781	6,713
Other liabilities	14,354	13,091
Total	**73,507**	**70,321**

Deposits from central banks were affected by the participation in the TLTRO III programme in the amount of €25.7 billion, under which HVB Group raised significantly higher funds than were simultaneously required for repayment under the TLTRO II programme.

Amounts owed to related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	4,951	5,114
of which:		
UniCredit S.p.A.	2,200	2,757
sister companies[1]	2,751	2,357
Joint ventures	—	—
Associates	189	29
Other investees	18	20
Total	**5,158**	**5,163**

1 Largest single items relate to UniCredit Bank Austria AG.

65 Deposits from customers

(€ millions)

	2020	2019
Current accounts	93,227	79,414
Cash collateral and pledged credit balances	7,720	5,824
Savings deposits	13,573	13,634
Repos	9,024	2,841
Term deposits	17,448	20,731
Promissory notes	1,273	1,382
Lease liabilities	496	467
Other liabilities	1,042	1,101
Total	**143,803**	**125,394**

Amounts owed to related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	312	325
of which:		
sister companies	309	271
subsidiaries	3	54
Joint ventures	3	3
Associates	1	—
Other investees	264	294
Total	**580**	**622**

66 Debt securities in issue

(€ millions)

	2020	2019
Bonds	28,963	25,770
of which:		
registered Mortgage Pfandbriefe	4,272	4,529
registered Public Pfandbriefe	2,041	2,258
Mortgage Pfandbriefe	14,543	12,125
Public Pfandbriefe	697	778
registered bonds	4,616	4,120
Other securities	2,780	2,486
Total	**31,743**	**28,256**

Debt securities in issue, payable to related parties

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

(€ millions)

	2020	2019
Non-consolidated affiliates	1,814	1,000
of which:		
UniCredit S.p.A.	1,814	1,000
sister companies	—	—
Joint ventures	—	—
Associates	—	—
Other investees	—	—
Total	**1,814**	**1,000**

Notes to the Balance Sheet (Continued)

67 Financial liabilities held for trading

(€ millions)

	2020	2019
Negative fair values arising from derivative financial instruments	47,647	41,201
Other financial liabilities held for trading	9,304	5,464
Total	**56,951**	**46,665**

The negative fair values arising 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.

68 Financial liabilities at FVTPL

The item contains exclusively own structured issues of €5,736 million (previous year: €5,936 million).

The difference between the carrying amount and the contractual amount payable amounts to €159 million (previous year: €198 million).

69 Hedging derivatives

(€ millions)

	2020	2019
Micro fair value hedge	348	357
Portfolio fair value hedge[1]	386	456
Total	**734**	**813**

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

70 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 €1,941 million net (previous year: €1,636 million). The fair value of the netted portfolio fair value hedge derivatives represents a net comparable amount resulting from a countermovement.

71 Liabilities of disposal groups held for sale

(€ millions)

	2019	2018
Deposits from banks	146	—
Deposits from customers	311	—
Tax liabilities	8	—
Other liabilities	160	—
Provisions	6	—
Total	**631**	**—**

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

72 Other liabilities

Other liabilities totalling €1,207 million (previous year: €1,857 million) essentially encompass deferred income and accruals compliant with IAS 37. Accruals include, notably, commitments arising from accounts payable with invoices outstanding, as well as short-term liabilities to employees.

73 Provisions

(€ millions)

	2020	2019
Provisions for pensions and similar obligations	1,387	1,339
Allowances for losses on guarantees and commitments and irrevocable credit commitments	432	225
Restructuring provisions	288	378
Other provisions	716	801
Payroll provisions	341	356
Provisions related to tax disputes (without income taxes)	34	38
Provisions for rental guarantees and dismantling obligations	98	95
Provisions for legal risks and similar	150	217
Other provisions	93	95
Total	**2,823**	**2,743**

The effects arising from changes in the discount rate and compounding led to an increase of €2 million (previous year: €2 million) in provisions recognised in the income statement in the reporting period. The effect arising from changes in the discount rate used for pension provisions is recognised in OCI.

Provisions for pensions and similar obligations
HVB Group grants its employees post-employment benefits that are structured as defined benefit plans or defined contribution plans.

In the case of defined benefit plans, the Bank undertakes to pay a defined future pension. The financial resources required to do so in the future can be accrued within the company (internal financing) or by payment of specific amounts to external pension funds (external financing).

In the case of defined contribution plans, the Bank undertakes to pay defined contributions to external pension funds which will later make the pension payments. Apart from paying the periodic contributions, the company has de facto no further obligations.

Defined benefit plans
Characteristics of the plans
The provisions for pensions and similar obligations include the direct commitments to HVB Group employees under company pension plans. These defined benefit plans are based in part on final salaries and in part on building-block schemes involving dynamic adjustment of vested rights. Fund-linked plans with a guaranteed minimum rate of interest of 2.75% have been granted in Germany since 2003.

The obligations financed by Pensionskasse der HypoVereinsbank VVaG (HVB Pensionskasse) are included in the disclosures regarding pension obligations (the total includes the obligations of HVB Unterstützungskasse e.V. reinsured by HVB Pensionskasse). The standard HVB Group valuation parameters are used when calculating these obligations. Any plan surplus is subject to the rules governing the asset ceiling, as the assets belong to the members of HVB Pensionskasse.

HVB Group set up plan assets in the form of contractual trust arrangements (CTA). This involved transferring the assets required to fund its pension obligations to legally independent trustees, including HVB Trust e.V., which manage the assets in line with the applicable trustee contracts.

There are no legal or regulatory minimum funding requirements in Germany.

Notes to the Balance Sheet (Continued)

HVB Group reorganised its company plans for pensioners (direct commitments) in 2009. HVB Trust Pensionsfonds AG (pension fund) was set up in this process. Both the pension obligations to pensioners who in October 2009 had already received pension benefits from the Bank and the assets required to cover these obligations were transferred to the pension fund. In December 2016, pension commitments and obligations of the Bank were again transferred to the pension fund for further beneficiaries who in October 2016 had already received pension benefits and the corresponding plan assets to cover the beneficiaries' claims. The pensioners' pension claims are not affected by the transfer; HVB continues to guarantee the pension. The pension fund is a legally independent institution regulated by the German Federal Financial Supervisory Authority (BaFin).

HVB Group is exposed to various risks in connection with its defined benefit plans. Potential pension risks exist with regard to both the benefit obligations (liabilities side) and the plan assets allocated to cover the beneficiaries' claims (assets side). The defined benefit obligations are exposed to actuarial risks such as interest rate risk, longevity risk, salary- and pension-adjustment risk and inflation risk. In the case of fund-linked pension obligations, there is the risk that it will prove impossible in the long run to generate the guaranteed interest rate of 2.75% from the funds allocated to the pension commitments, given persistently low interest rates. With regard to the capital investment, the assets are primarily exposed to market risk such as price risks in securities holdings or changes in the value of real estate investments.

The major pension risk is thus expressed as a deterioration in the funded status as a result of unfavourable developments of defined benefit obligations and/or plan assets, since the sponsoring companies are required to act to service the beneficiaries' claims in the event of any plan deficits. No unusual, company-specific or plan-specific risks or material risk concentrations that could affect the Group's pension plans are currently identifiable.

Reconciliations

The amounts arising under defined benefit plans for post-employment benefits recognised in the consolidated balance sheet can be derived as follows:

(€ millions)

	2020	2019
Present value of funded pension obligations	5,931	5,641
Fair value of plan assets	(4,552)	(4,314)
Funded status	**1,379**	**1,327**
Present value of unfunded pension obligations	8	12
Net liability (net asset) of defined benefit plans	**1,387**	**1,339**
Asset ceiling	—	—
Capitalised excess cover of plan assets	—	—
Recognised pension provisions	**1,387**	**1,339**

The following tables show the changes in the present value of the total (funded and unfunded) pension obligations, the fair value of the plan assets and the net defined benefit liability (asset) from defined benefit plans resulting from the offsetting of these totals. The tables also show the changes in the effects of the asset ceiling during the reporting period and the reconciliations from the opening to the closing balance of the capitalised excess cover of plan assets and the recognised provisions for pensions and similar obligations:

(€ millions)

	PRESENT VALUE OF PENSION COMMITMENTS	FAIR VALUE OF PLAN ASSETS	NET LIABILITY (NET ASSET) OF DEFINED BENEFIT PLANS	ASSET CEILING	CAPITALISED EXCESS COVER OF PLAN ASSETS	RECOGNISED PENSION PROVISIONS
Balance at 1/1/2020	**5,653**	**(4,314)**	**1,339**	**—**	**—**	**1,339**
Service cost component						
Current service cost	75	—	75	—	—	75
Past service cost	—	—	—	—	—	—
Gains and losses on settlement	—	—	—	—	—	—
Net interest component						
Interest expense/(income)	68	(52)	16	—	—	16
Service costs and net interest of defined						
benefit plans recognised in profit or loss						
for the period	**143**	**(52)**	**91**	**—**	**—**	**91**
Remeasurement component						
Gains/(losses) on plan assets excluding						
amounts included in net interest on the net						
defined benefit liability (asset)	—	(107)	(107)	—	—	(107)
Actuarial gains/(losses) –						
demographic assumptions	—	—	—	—	—	—
Actuarial gains/(losses) –						
financial assumptions	314	—	314	—	—	314
Actuarial gains/(losses) –						
experience adjustments	(6)	—	(6)	—	—	(6)
Changes due to asset ceiling excluding						
amounts included in net interest on the net						
defined benefit liability (asset)	—	—	—	—	—	—
Remeasurements component of						
defined benefit plans recognised in OCI	**308**	**(107)**	**201**	**—**	**—**	**201**
Other changes						
Excess cover of plan assets	—	—	—	—	—	—
Exchange differences	(7)	9	2	—	—	2
Contributions to the plan:						
Employer	—	(219)	(219)	—	—	(219)
Plan participants	7	(7)	—	—	—	—
Pension payments	(157)	136	(21)	—	—	(21)
Business combinations, disposals and other	(8)	2	(6)	—	—	(6)
Balance at 31/12/2020	**5,939**	**(4,552)**	**1,387**	**—**	**—**	**1,387**

Notes to the Balance Sheet (Continued)

(€ millions)

	PRESENT VALUE OF PENSION COMMITMENTS	FAIR VALUE OF PLAN ASSETS	NET LIABILITY (NET ASSET) OF DEFINED BENEFIT PLANS	ASSET CEILING	CAPITALISED EXCESS COVER OF PLAN ASSETS	RECOGNISED PENSION PROVISIONS
Balance at 1/1/2019	**4,874**	**(4,073)**	**801**	**—**	**—**	**801**
Service cost component						
Current service cost	62	—	62	—	—	62
Past service cost	—	—	—	—	—	—
Gains and losses on settlement	—	—	—	—	—	—
Net interest component						
Interest expense/(income)	102	(86)	16	—	—	16
Service costs and net interest						
of defined benefit plans recognised in						
profit or loss for the period	**164**	**(86)**	**78**	**—**	**—**	**78**
Remeasurement component						
Gains/(losses) on plan assets excluding						
amounts included in net interest on the net						
defined benefit liability (asset)	—	(101)	(101)	—	—	(101)
Actuarial gains/(losses) –						
demographic assumptions	—	—	—	—	—	—
Actuarial gains/(losses) –						
financial assumptions	734	—	734	—	—	734
Actuarial gains/(losses) –						
experience adjustments	(9)	—	(9)	—	—	(9)
Changes due to asset ceiling excluding						
amounts included in net interest on the net						
defined benefit liability (asset)	—	—	—	—	—	—
Remeasurements component of defined						
benefit plans recognised in OCI	**725**	**(101)**	**624**	**—**	**—**	**624**
Other changes						
Excess cover of plan assets	—	—	—	—	—	—
Exchange differences	5	(7)	(2)	—	—	(2)
Contributions to the plan:						
Employer	—	(156)	(156)	—	—	(156)
Plan participants	8	—	8	—	—	8
Pension payments	(148)	132	(16)	—	—	(16)
Business combinations, disposals and other	25	(23)	2	—	—	2
Balance at 31/12/2019	**5,653**	**(4,314)**	**1,339**	**—**	**—**	**1,339**

At the end of the reporting period, 34% (previous year: 33%) of the present value of the defined benefit obligations of €5,939 million (previous year: €5,653 million) was attributable to active employees, 25% (previous year: 25%) to former employees with vested benefit entitlements and 41% (previous year: 42%) to pensioners and surviving dependants.

Actuarial assumptions
The main actuarial assumptions used to determine the present value of the defined benefit obligation are listed below. The summarised disclosure for several plans takes the form of weighted average factors:

(in %)

	2020	2019
Actuarial interest rate	0.85	1.20
Rate of increase in pension commitments	1.40	1.50
Rate of increase in future compensation and over career	2.00	2.00

The mortality rate underlying the actuarial calculation of the present value of the defined benefit obligation is based on the modified Heubeck 2018 G tables (generation tables) that allow for the probability of mortality to fall to 95% (previous year: 95%) for women and 80% (previous year: 80%) for men.

HVB Group similarly reduces the probability of disability based on these guidance tables to 80% (previous year: 80%) for women and men equally. Since any changes in the actuarial assumptions regarding disability fundamentally only have a minor impact on the present value of the defined benefit obligation, HVB Group does not calculate any sensitivities for this valuation parameter.

In addition, the present value of the defined benefit obligation is influenced by assumptions regarding future inflation rates. Inflation effects are normally taken into account in the assumptions listed above.

Sensitivity analyses
The sensitivity analyses discussed below are intended to show how the present value of the defined benefit obligation would change given a change to an actuarial assumption in isolation with the other assumptions remaining unchanged compared with the original calculation. Possible correlation effects between the individual assumptions are not taken into account in this context. The sensitivity analyses are based on the changes to the actuarial assumptions expected by HVB Group at the reporting date for the subsequent reporting period.

Notes to the Balance Sheet (Continued)

An increase or decrease in the significant actuarial assumptions in the amount of the percentage points shown in the table would have had the following impact on the present value of the defined benefit obligation at the reporting date:

	CHANGES OF THE ACTUARIAL ASSUMPTIONS	IMPACT ON THE PRESENT VALUE OF PENSION COMMITMENTS		
		PRESENT VALUE OF LIABILITY	ABSOLUTE CHANGES	RELATIVE CHANGES
		€ millions	€ millions	in %
Sensitivities at 31/12/2020				
	Basic value of the calculation of sensitivity	5,939		
Actuarial interest rate	Increase of 25 basis point	5,672	(267)	(4.5)
	Decrease of 25 basis point	6,225	286	4.8
Rate of increase in pension commitments	Increase of 25 basis point	6,118	179	3.0
	Decrease of 25 basis point	5,768	(171)	(2.9)
Rate of increase in future compensation/career trend	Increase of 25 basis point	5,944	5	0.1
	Decrease of 25 basis point	5,934	(5)	(0.1)
Sensitivities at 31/12/2019				
	Basic value of the calculation of sensitivity	5,653		
Actuarial interest rate	Increase of 25 basis point	5,403	(250)	(4.4)
	Decrease of 25 basis point	5,922	269	4.8
Rate of increase in pension commitments	Increase of 25 basis point	5,824	171	3.0
	Decrease of 25 basis point	5,491	(162)	(2.9)
Rate of increase in future compensation/career trend	Increase of 25 basis point	5,658	5	0.1
	Decrease of 25 basis point	5,648	(5)	(0.1)

The observable decline in mortality rates is associated with an increase in life expectancy depending on the individual age of each beneficiary. In order to determine the sensitivity of the mortality or longevity, the lifetime for all beneficiaries was increased by one year. The present value of the defined benefit obligation at 31 December 2020 would rise by €221 million (3.7%) to €6,160 million (previous year: by €205 million (3.6%) to €5,858 million) as a result of this change. HVB Group considers an opposite trend, that is an increase in mortality or a decrease in life expectancy, to be unlikely and has therefore not calculated a sensitivity for this case in the reporting period (and in the previous year).

When determining the sensitivities of the defined benefit obligation for the significant actuarial assumptions, the same method has been applied (projected unit credit method) as has been used to calculate the pension provisions recognised in the consolidated balance sheet. Increases and decreases in the various valuation assumptions do not entail the same absolute amount in their impact when the defined benefit obligation is calculated, due mainly to the compound interest effect when determining the present value of the future benefit. If more than one of the assumptions are changed simultaneously, the combined effect does not necessarily correspond to the sum total of the individual effects. Furthermore, the sensitivities only reflect a change in the present value of the defined benefit obligation for the actual extent of the change in the assumptions (such as 0.25%). If the assumptions change to a different extent, this does not necessarily have a straight-line impact on the present value of the defined benefit obligation. Since the sensitivity analyses are based on the average duration of the expected pension obligation, and consequently the expected disbursement dates are not taken into account, they only result in indicative information or trends.

Asset liability management

The plan assets are managed by a trustee with a view to ensuring that the present and future pension obligations are settled by applying an adequate investment strategy, thus minimising the risk of the trustors or sponsoring companies having to provide additional capital.

Under the CTA, the capital investment decisions are taken by an institutionalised body, the Investment Committee, which defines the investment strategy and policies for the plan assets. The concept calls for the assets to be invested in line with the structure of the pension obligations in particular and an appropriate return to be generated taking into account the associated risks. In order to optimise the risk/return ratio, the Investment Committee sets strategic allocation ranges and investment limits for the asset classes in the plan assets, which can be exploited flexibly within the agreed risk budget. The bodies and processes required by law have been set up as appropriate for HVB Pensionskasse and the pension fund.

In order to allow for an integral view on plan assets and defined benefit obligations (asset liability management), the pension risks are monitored regularly with the aid of a specially developed risk model and included in the Bank's risk calculation. Since HVB Group employs various methods involving legally independent entities to implement the company pension plans, risk management concepts including stress tests and analysis of risk-taking capacity are also applied in specific instances.

Alongside the actuarial risks mentioned above, the risks associated with the defined benefit obligations relate primarily to financial risks in connection with the plan assets. The capital investment risk in the funding of the pension obligations encompasses notably potential liquidity, credit, concentration, market and real estate risks.

Liquidity risk can result from non-existent or limited marketability of the capital investments, which may cause losses to be realised when the assets are sold to settle payment obligations. HVB is not currently exposed to this risk as the expected incoming payments are sufficient to meet the payment obligations. In addition, an appropriate proportion of the capital investments is invested in assets classified as liquid (cash and cash equivalents/term deposits). Liquidity projections are prepared at regular intervals with a view to continue avoiding this risk.

Credit risk stems from anything from a deterioration in the solvency of individual debtors through to insolvency. This risk is mitigated by deliberately spreading the capital investments and complying with specific investment policies regarding the creditworthiness of issuers. The relevant ratings are monitored constantly.

Concentration risk arises from excessive investment in an individual asset class, individual industry, individual security or individual property. This risk is countered by means of broad diversification in line with investment policies, ongoing review of the capital investment policy and specific parameters for the asset managers. Among other things, targeted investment in mixed investment funds is used to reduce concentration risk by diversifying the composition of the fund assets.

Market risk has its roots in the risk of declining fair values caused by negative changes in market prices, equity prices and changes in interest rates. Here, too, compliance with the parameters specified for the composition and diversity of the capital investments is ensured and risk-limiting investment policies are defined for the asset managers.

Real estate risk exists with both directly held real estate and special-purpose real estate funds. It results from factors like possible unpaid rents, loss of property value, high maintenance costs and declining location attractiveness. To minimise these risks, the proportion that may be invested in real estate is constrained by a limit and the greatest possible diversification is targeted. In addition, no short-term rental contracts are concluded for directly owned real estate.

Disaggregation of plan assets

The following table shows a disaggregation of the plan assets used to fund the defined benefit obligations by asset class:

(€ millions)

	2020	2019
Participating interests	55	68
Debt securities	269	270
Properties	217	220
Mixed investment funds	3,276	3,132
Property funds	512	518
Cash and cash equivalents/term deposits	220	100
Other assets	3	6
Total	**4,552**	**4,314**

Quoted market prices in an active market were observed for most of the fixed-income securities held directly and almost all the types of asset held in the mixed investment fund. As a general rule, the fixed-income securities have an investment grade rating.

Notes to the Balance Sheet (Continued)

In terms of amount, the investment in mixed investment funds represents the lion's share of the asset allocation for the plan assets. The deliberate investment in various asset classes and the general restriction to traditional investment instruments serve to ensure a risk-mitigating minimum diversification and also reflect a conservative underlying strategy. The high proportion of bonds with a medium- to long-term benchmark (such as government and corporate bonds, and Pfandbriefe) held in the fund implies low volatility with the intention of balancing the development in the value of the long-term pension commitments that follows general interest rates.

The following table shows a detailed breakdown of the mixed investment fund:

(in %)

	2020	2019
Equities	10.8	8.3
German equities	2.1	1.5
European equities	5.5	6.3
Other equities	3.2	0.5
Government bonds	36.1	33.8
Pfandbriefe	8.7	17.2
Corporate bonds	33.0	26.8
German corporate bonds	3.9	4.7
European corporate bonds	19.2	16.4
Other corporate bonds	9.9	5.7
Fund certificates	7.5	7.3
Cash and cash equivalents/term deposits	3.9	6.6
Total	**100.0**	**100.0**

The plan assets comprised own financial instruments of the Group, property occupied by and other assets used by HVB Group companies at the reporting date:

(€ millions)

	2020	2019
Participating interests	—	—
Debt securities	9	9
Properties	—	—
Mixed investment funds	177	244
Property funds	—	—
Cash and cash equivalents/term deposits	220	100
Other assets	—	—
Total	**406**	**353**

Future cash flows
There are financing agreements at HVB Group that contain measures to fund defined benefit plans. The minimum funding requirements included in the agreements may have an impact on future contribution payments. In the case of HVB Trust Pensionsfonds AG, HVB Group is liable for calls for additional capital should the assets fall below the minimum cover provision. For HVB Pensionskasse, the Bank is required to make an additional contribution if the permanent financing of the obligations is no longer ensured. No such requirement for calls for additional capital exists for the CTA.

HVB Group intends to make contributions of €22 million (previous year: €27 million) to defined benefit plans in the 2021 financial year.

The weighted average duration of HVB Group's defined benefit obligations at the reporting date amounted to 19.0 years (previous year: 18.8 years).

Multi-employer plans
HVB Group is a member of Versorgungskasse des Bankgewerbes e.V. (BVV), which also includes other financial institutions in Germany in its membership. BVV provides company pension benefits for eligible employees of the sponsoring companies. The BVV tariffs allow for fixed pension payments with profit participation. On account of the employer's statutory subsidiary liability applicable in Germany (Section 1 (1) 3 of the German Occupational Pensions Act (Betriebsrentengesetz – BetrAVG)), HVB Group classifies the BVV plan as a multi-employer defined benefit plan.

Since the available information is not sufficient to allow this plan to be accounted for as a defined benefit plan by allocating to the individual member companies the assets and the pension obligations relating to active and former employees, HVB Group accounts for the plan as if it were a defined contribution plan.

In the event of a plan deficit, the Group may be exposed to investment risk and actuarial risk. In addition, a need for adjustment might arise from compensating the beneficiaries for inflation. HVB Group does not currently expect that the statutory subsidiary liability will be used.

HVB Group expects to book employer contributions of €22 million for this pension plan in the 2021 financial year (previous year: €21 million). Due to the current interest rate environment, BVV reduced the payment for the future pension rights in 2016. To exempt the Bank's employees from this reduction in payment, the Bank, as the employer, pays an additional contribution so that employees do not suffer any disadvantage in their future pension rights. This additional contribution amounts to €6 million in the 2021 financial year (previous year: €6 million).

Defined contribution plans
HVB Group companies pay fixed amounts for each period to independent pension organisations for the defined contribution pension commitments. The contributions for the defined contribution plans recognised as current expense under payroll costs totalled €24 million during the reporting period (previous year: €24 million).

The employer contributions to the statutory pension scheme and the alternative professional pension schemes, which qualify as defined contribution state plans, are similarly included in payroll costs. Such contributions amounted to €84 million in the reporting period (previous year: €83 million).

Allowances for losses on financial guarantees and irrevocable credit commitments, restructuring provisions and other provisions (€ millions)

	ALLOWANCES FOR LOSSES ON FINANCIAL GUARANTEES AND COMMITMENTS AND IRREVOCABLE CREDIT COMMITMENTS		RESTRUCTURING PROVISIONS1[1]		OTHER PROVISIONS	
	2020	2019	2020	2019	2020	2019
Balance at 1/1	**225**	**214**	**378**	**256**	**801**	**2,182**
Changes in consolidated group	—	—	—	—	—	(42)
Changes arising from foreign currency translation	(3)	—	—	—	(1)	25
Transfers to provisions	366	273	23	324	113	148
Reversals	(156)	(262)	(7)	(129)	(106)	(419)
Reclassifications	—	—	—	—	45	—
Amounts used	—	—	(27)	(28)	(129)	(1,120)
Non-current assets or disposal groups held for sale	—	—	—	—	—	—
Other changes	—	—	(79)	(45)	(7)	27
Balance at 31/12	**432**	**225**	**288**	**378**	**716**	**801**

1 The transfers and reversals are included in the income statement in the item "Restructuring costs" together with other restructuring costs accruing during the reporting period.

Notes to the Balance Sheet (Continued)

Changes in provisions for financial guarantees and irrevocable credit commitments (allowances) (€ millions)

	STAGE 1	STAGE 2	STAGE 3	TOTAL
Balance at 1/1/2020	**47**	**22**	**156**	**225**
Addition due to new business	22	25	—	47
Change in carrying amount within the same stage	16	6	240	262
Transfers to another stage due to deterioration in credit quality	(14)	43	—	29
from Stage 1 to Stage 2	(14)	43	—	29
from Stage 2 to Stage 3	—	—	—	—
from Stage 1 to Stage 3	—	—	—	—
Transfers to another stage due to improvement in credit quality	12	(23)	—	(11)
from Stage 2 to Stage 1	12	(23)	—	(11)
from Stage 3 to Stage 2	—	—	—	—
from Stage 3 to Stage 1	—	—	—	—
Increase in impairment reported directly in equity for				
interest claims not recognised in profit or loss	—	—	—	—
Changes due to modification of assets not leading to derecognition	—	—	—	—
Disposals (reversal due to disposal of receivable)	(28)	(17)	(72)	(117)
Disposals (utilisation of impairments)	—	—	—	—
Reversal of the discounted amount and recognition of				
interest claims not previously recognised in profit or loss	—	—	1	1
Foreign currency movements and other changes	—	—	(4)	(4)
Balance at 31/12/2020	**55**	**56**	**321**	**432**
Balance at 1/1/2019	**49**	**25**	**140**	**214**
Addition due to new business	28	—	—	28
Changes within the same stage (net balance)[1]	(13)	2	109	98
Reversal on account of derecognition of the financial obligation	(17)	(5)	(94)	(116)
Utilisation of existing provisions	—	—	—	—
Foreign currency movements and other changes	—	—	1	1
Balance at 31/12/2019	**47**	**22**	**156**	**225**

1 Transfers between the individual stages are shown here (disposal at the previous stage, addition at the new stage).

Restructuring provisions

The restructuring provisions essentially relate to measures taken by HVB Group as part of its Team 23 strategic plan. The implementation of the four-year Team 23 strategic plan will lead to an adjustment in the personnel capacity, among other things. Where this cannot be achieved through natural fluctuation or further qualification of employees for new roles, severance agreements will be concluded. In essence, this involved setting aside restructuring provisions of €324 million in the previous year, which were increased slightly in the reporting year.

Other provisions

Changes in other provisions

(€ millions)

	PAYROLL PROVISIONS	PROVISIONS RELATED TO TAX DISPUTES (WITHOUT INCOME TAXES	PROVISIONS FOR RENTAL GUARANTEES AND DISMANTLING OBLIGATIONS	PROVISIONS FOR LEGAL RISKS ETC.	OTHER PROVISIONS	TOTAL OTHER PROVISIONS
Balance at 1/1/2020	**356**	**38**	**95**	**217**	**95**	**801**
Changes in consolidated group	—	—	—	—	—	—
Changes arising from foreign currency translation	—	—	—	—	(1)	(1)
Transfers to provisions	16	6	20	20	51	113
Reversals	—	—	(10)	(59)	(37)	(106)
Reclassifications	45	—	—	—	—	45
Amounts used	(76)	(1)	(6)	(28)	(18)	(129)
Non-current assets or disposal groups held for sale	—	—	—	—	—	—
Other changes	—	(9)	(1)	—	3	(7)
Balance at 31/12/2020	**341**	**34**	**98**	**150**	**93**	**716**

The payroll provisions carried under other provisions encompass long-term obligations to employees such as provisions for service anniversary awards, early retirement or partial retirement. In addition, payroll provisions cover the parts of the bonus that are disbursed on a deferred basis, or transferred in cases where the bonus is granted in the form of shares, with the waiting period exceeding one year. The disbursement of these bonuses is additionally dependent upon the achievement of pre-defined targets. The bonus commitments for the 2015, 2016, 2017, 2018, 2019 and 2020 financial years to be disbursed as of 2021 are included here accordingly. The bonus provisions included here have been taken to the income statement in both the reporting period and the previous financial years. It is considered highly probable that the bonus will be disbursed. For details of the bonus plan, please refer to the Note "Operating costs".

The amount of the respective provisions reflects the best estimate of the amount required to settle the obligation at the reporting date. Nevertheless, estimating the amounts of these provisions is subject to uncertainties. In the case of rental guarantees in particular, cost estimates are validated on a regular basis in addition to the assumptions regarding terms.

Notes to the Balance Sheet (Continued)

74 Shareholders' equity

The shareholders' equity of HVB Group at 31 December 2020 consisted of the following:

Subscribed capital

At 31 December 2020, the subscribed capital of HVB totalled €2,407 million (previous year: €2,407 million) and consisted of 802,383,672 no par shares of common bearer stock (previous year: 802,383,672 no par shares).

The proportionate amount of share capital attributable to the share amounts to €3.00 per no par share. The shares are fully paid in.

Additional paid-in capital

The additional paid-in capital results from premiums generated on the issuance of shares; the total at 31 December 2020 amounted to €9,791 million (previous year: €9,791 million).

Other reserves

Other reserves of €3,528 million (previous year: €3,396 million) mainly contain retained earnings. The slight increase is due to a transfer of €268 million from the profit available for distribution, the decline of €158 million in actuarial losses on defined benefit plans recognised under other reserves and the allocation of €50 million to the revaluation surplus for owner-occupied real estate.

Change in valuation of financial instruments

The hedge reserve shows a year-on-year decline of €7 million to €21 million.

The FVTOCI reserve of €29 million (previous year: €15 million) includes the difference between the amortised cost and fair value of the securities allocated to this category. In the reporting year, the sum of €14 million was transferred through other comprehensive income to the consolidated statement of total comprehensive income.

Additional Tier 1 capital

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 for five years; from 20 October 2025 the interest rate corresponds to the 5-year EUR mid-market swap rate of +6.250% p.a. 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 for six years; from 20 October 2026 the interest rate corresponds to the 5-year EUR mid-market swap rate of +6.350% p.a. until the next interest rate adjustment date after five years.

The AT1 bonds are shown as additional Tier 1 capital (AT1) under regulatory own funds; the interest is recognised as appropriation of profit based on a resolution of HVB's Management Board.

75 Subordinated capital

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

(€ millions)

	2020	2019
Subordinated liabilities	1,193	410
Hybrid capital instruments	1,750	54
Total	**2,943**	**464**

In this context, subordinated liabilities and hybrid capital instruments have been classified as Tier 2 capital for banking supervisory purposes in accordance with the provisions of Articles 62 (1a), 63 to 65, 66 (1a) and 67 CRR. Only the new AT1 bonds issued in the amount of €1,700 million are recognised for banking supervisory purposes as additional Tier 1 capital instruments pursuant to Article 51 ff CRR.

The following table shows the breakdown of subordinated capital by balance sheet item:

(€ millions)

	2020	2019
Deposits from customers	—	—
Deposits from banks	313	313
Debt securities in issue	930	151
Additional Tier 1 capital	1,700	—
Total	**2,943**	**464**

We have incurred interest expenses of €9 million (previous year: €11 million) in connection with this subordinated capital. Subordinated capital includes pro rata interest of €1 million (previous year: €1 million).

Subordinated liabilities

The borrowers cannot be obliged to make early repayments in the case of subordinated liabilities. In the event of insolvency or liquidation, subordinated liabilities can only be repaid after the claims of all primary creditors have been settled.

There were subordinated liabilities of €313 million payable to related parties (banks) in the reporting period (previous year: €313 million).

In addition, HVB issued regulatory own funds in the form of a Tier 2 bond at the end of June 2020, which was fully subscribed by UniCredit S.p.A. This is contained in the balance sheet item "Debt securities in issue". The Bank is optimising its capital structure with the issue, also against the backdrop of the changes in regulatory requirements by the European Banking Authority (EBA). The subordinate bond meets the criteria set out in the Capital Requirements Regulation (CRR II) as Tier 2 capital and can also be used to meet MREL requirements (SRMR II).

The subordinate bond has a volume of €800 million and a term of ten years with a repayment option for the issuer after five years. The bond has a fixed-interest rate of 3.469% for the first five years that is re-fixed after five years based on the then valid 5-year swap rate plus a spread of 380 basis points provided the bond is not repaid after five years. The conditions at the time of issuance (at arm's length) are in line with the market.

Hybrid capital instruments

Hybrid core capital instruments include two AT1 bonds issued in 2020 totalling €1,700 million, which are accounted for under regulatory own funds as additional Tier 1 capital. These bonds are wholly held by UniCredit S.p.A. Please refer to the note on shareholders' equity for further details.

In addition, hybrid core capital instruments include issues in the form of capital contributions by silent partners, some of which are issued by subsidiaries founded specifically for this purpose. These satisfy the requirements for classification as Tier 2 capital as defined in Article 63 CRR. At the reporting date, no hybrid capital of HVB Group was included in our regulatory capital base.

Notes to the Cash Flow Statement

76 Notes to the items in the cash flow statement

The cash flow statement shows the cash flows for the reporting period, divided into the areas “operating activities”, “investing activities” and “financing activities”. Operating activities are defined broadly enough to allow the same breakdown as for operating profit.

In the 2020 financial year, the following recognition adjustments were made. Among other things, securities holdings that the Bank holds in the course of its operating activities were allocated to operating activities. This adjustment was made to simply the approach within the cash flow statement and thus increases transparency and the relevance of the information it contains.

(in Mio €)

	2019 BEFORE ADJUSTMENT	REVALUATION MODEL IAS 16	CHANGES IN FAIR VALUE OF INVESTMENT PROPERTY	INCOME AND EXPENSES FROM INITIAL CONSOLI-DATION	CHANGES IN FINANCIAL ASSETS AT FVTPL & AT FVTOCI	RECAST TAX	2019 AFTER ADJUST-MENTS
Consolidated profit/(loss)	**810**	**—**	**—**	**—**	**—**	**18**	**828**
Write-downs and depreciation less write-ups on							
non-current assets	(700)	1,253	(70)	—	—	—	483
Change in other non-cash positions	1,691	—	70	(71)	—	—	1,690
Other adjustments (net interest and dividend							
income from the income statement, taxes on							
income paid)	(2,521)	—	—	71	—	—	(2,450)
Financial assets at FVTPL	—	—	—	—	1,208	—	1,208
Financial assets at FVTOCI	—	—	—	—	(7,288)	—	(7,288)
Other liabilities from operating activities	(2,090)	(402)	—	—	—	—	(2,492)
Cash flows from operating activities	**12,585**	**(851)**	**—**	**—**	**(6,080)**	**18**	**7,374**
Proceeds from the sale of investments	2,044	—	—	—	—	—	2,044
Payments for the acquisition of investments	(7,876)	—	—	—	6,080	—	(1,796)
Cash flows from investing activities	**(6,071)**	**—**	**—**	**—**	**6,080**	**—**	**9**
Changes in cash from other change in equity	(7,876)	(851)	—	—	—	(18)	(508)
Cash flows from financing activities	**(289)**	**(851)**	**—**	**—**	**—**	**(18)**	**(1,158)**

The write-ups that were undertaken upon applying the revaluation model based on IAS 16 are no longer shown under the item “Write-downs and depreciation less write-ups on non-current assets”. The deferred taxes resulting from the write-up are now recognised under the item “Other liabilities from operating activities”, the remaining amount posted directly in equity without affecting profit or loss is reported in the item “Changes in cash from other change in equity”. This results in changes to all three types of cash flow.

Within the cash flow from operating activities, the recognition of gains and losses on the changes in fair values of investment properties has been reclassified from the item “Write-downs and depreciation less write-ups on non-current assets” and the income and expenses from initial consolidations from the item “Other adjustments” to the item “Change in other non-cash positions”. The previous-year figures were adjusted as shown. As investment properties are measured at fair value through profit or loss, the changes in measurement are reported in this line analogously to the changes in measurement of financial instruments.

In addition, the recognition of the changes in financial assets at FVTPL and the financial assets at FVTOCI were reclassified from the items “Proceeds from the sale of investments” and “Payments for the acquisition of investments” to the new items “Financial assets at FVTPL” and “Financial assets at FVTOCI” in the cash flows from operating activities as these are available-for-sale financial assets that are part of HVB’s operating activities analogous to the receivables portfolio. For this reason, they are to be allocated to HVB’s current assets. This results in an adjustment to both the cash flows from operating activities and the cash flows from investing activities. The previous-year figures were adjusted as shown.

Due to the "Change in recognition of value adjustments to deferred taxes" described in the Note "Consistency", the income tax expense in 2019 declined by €18 million. As a result, the cash flows from operating activities increase and the item "Changes in cash from other change in equity" decreases accordingly in the cash flows from financing activities.

The cash and cash equivalents shown correspond to the "Cash and cash balances" item in the balance sheet, comprising both cash on hand and balances at central banks repayable on demand.

The "Change in other non-cash positions" item comprises the changes in the measurement of financial instruments and investment properties, net additions to deferred taxes, changes in provisions, changes in prorated and deferred interest, the reversal of premiums and discounts, changes arising from measurement using the equity method, deconsolidation results and minority interests in net income.

All proceeds and payments from transactions relating to equity and subordinated capital are allocated to cash flows from financing activities. The portfolios of subordinated and hybrid capital included as financing liabilities in the cash flows from financing activities have increased by a net €1,691 million in the reporting period (previous year: down €130 million).

There were no gains on the disposal of shares in fully consolidated companies in the 2020 financial year.

There were no significant acquisitions of subsidiaries or associates in the 2020 and 2019 financial years.

The following table shows the assets and liabilities of the fully consolidated companies sold: (€ millions)

	2020		2019	
	ACQUIRED	SOLD	ACQUIRED	SOLD
Assets				
Cash and cash balances	—	—	—	—
Financial assets held for trading	—	—	—	—
Financial assets at FVTPL	—	—	—	—
Financial assets at FVTOCI	—	—	—	—
Loans and receivables with banks (at cost)	—	—	—	—
Loans and receivables with customers (at cost)	—	—	—	—
Hedging derivatives	—	—	—	—
Hedge adjustment of hedged items in the portfolio fair value hedge	—	—	—	—
Shares in associates accounted for using the equity method and joint ventures				
accounted for using the equity method	—	—	—	—
Property, plant and equipment	—	—	—	—
Investment properties	—	—	—	—
Intangible assets	—	—	—	—
of which: goodwill	—	—	—	—
Tax assets	—	—	—	—
Non-current assets or disposal groups held for sale	—	—	—	2,540
Other assets	—	—	—	—
Liabilities				
Deposits from banks	—	—	—	—
Deposits from customers	—	—	—	—
Debt securities in issue	—	—	—	—
Financial liabilities held for trading	—	—	—	—
Financial liabilities at FVTPL	—	—	—	—
Hedging derivatives	—	—	—	—
Hedge adjustment of hedged items in the portfolio fair value hedge	—	—	—	—
Tax liabilities	—	—	—	—
Liabilities of disposal groups held for sale	—	—	—	2,458
Other liabilities	—	—	—	—
Provisions	—	—	—	—

Other Information

77 Events after the reporting period
At HVB Group there were no noteworthy events after 31 December 2020.

78 Information regarding lease operations
HVB Group as lessee
Under IFRS 16 the accounting of leases by the lessee is carried out on the basis of a uniform accounting model (referred to as right-of-use approach).

The rental and lease agreements entered into by HVB Group as lessee relate to real estate (land and buildings) on the one hand and movables (operating and office equipment including vehicles) on the other hand. The lease agreements for real estate are generally concluded for a non-cancellable basic term of ten years and usually include extension options with periods of between three and five years. These agreements also contain price adjustment clauses in the form of stepped rents or index clauses; termination or purchase options are not usually agreed. The extension options are used to give HVB Group the maximum operational flexibility in relation to the assets used by the Bank. Most of these contractual options can only be exercised by HVB Group as the lessee and not by the respective lessor. The lease agreements for movables have been concluded at customary market terms for lease periods of between three and nine years. No variable lease payments were agreed for any of the lease agreements concluded by HVB Group as lessee. The Bank's obligations under lease agreements are secured by the ownership rights of the respective lessor to the leased assets. Leased objects may therefore not be used as security for borrowing.

Amounts recognised in the consolidated balance sheet
In the consolidated balance sheet the following items were recognised in connection with lease agreements where HVB Group is lessee.

The following table shows the carrying amount of the right-of-use assets reported in property plant and equipment at the reporting date by class of underlying asset:

(€ millions)

	2020	2019
Right-of-use assets (property, plant and equipment)		
Leased land and buildings	260	273
Leased plant and office equipment	10	12
Carrying amount 31/12	**270**	**285**

Additions to the right-of-use assets recognised in property, plant and equipment amounted to €70 million during the reporting year (previous year: €35 million).

The carrying amount of the lease liabilities reported in the items "Deposits from customers" and "Deposits from banks" at the reporting date is as follows:

(€ millions)

	2020	2019
Lease liabilities	515	487
Carrying amount 31/12	**515**	**487**

The following table contains a maturity analysis for lessee's lease liabilities and shows the undiscounted lease payments to be made after the reporting date:

(€ millions)

	2020	2019
up to 1 year	85	63
from 1 year to 2 years	82	58
from 2 years to 3 years	77	55
from 3 years to 4 years	60	53
from 4 years to 5 years	31	50
from 5 years and over	210	242
Total	**545**	**521**

HVB Group sees no significant liquidity risk with regard to lease liabilities. The lease liabilities are monitored by the Bank's Treasury unit.

Amounts recognised in the consolidated income statement
The consolidated income statement contains the following amounts in connection with leases in which HVB Group is lessee.

The following tables shows the depreciation charge on the right-of-use assets contained in property, plant and equipment for the financial year by class of underlying assets. The write-downs are recognised under "Amortisation, depreciation and impairment losses on intangible and tangible assets" within operating costs:

(€ millions)

	2020	2019
Depreciation expense from right-of-use assets (property, plant and equipment)		
Leased land and buildings	34	41
Leased plant and office equipment	9	12
Total	**43**	**53**

The effect recognised in interest expense from the interest on lease liabilities for the financial year is as follows:

(€ millions)

	2020	2019
Interest expense from lease liabilities	6	6

Other Information (Continued)

The following table shows other expenses and income in connection with lease agreements of the lessee that were recognised in the consolidated income statement during the financial year. Expenses in connection with short-term lease agreements and lease agreements that are based on low-value assets, are recognised in the "Other administrative expenses" item, whereas income from subleasing the right-of-use assets is shown as other operating income in property, plant and equipment:

(€ millions)

	2020	2019
Expense from short-term leases	5	10
Expense from leases for low-value assets (excl. expense from short-term		
leases based on an asset of low value)	—	—
Income from subleases of right-of-use assets (property, plant and equipment)	1	3

Right-of-use assets that correspond to the definition of an investment property and are reported as investment properties were not included in the above figures for carrying amount, additions, depreciation amount or for income from the subleasing of right-of-use assets. Disclosures on such right-of-use assets can generally be found in the Note "Investment properties".

In the reporting year, cash outflows from leases totalled €98 million (previous year: €72 million).

For reasons of portfolio and location optimisation, HVB Group sold the "Am Tucherpark" site in Munich in the reporting period as the seller/lessee within the framework of a sale and leaseback transaction. The properties were previously classified as "Non-current assets or disposal groups held for sale" in accordance with IFRS 5. In this transaction, the properties were first transferred to the buyer/lessor Commerz Real (sale) in accordance with the criteria for sales as set out in IFRS 15 and then partially leased back (leaseback) from them. When the purchase agreement was signed in early December 2019, a lease agreement was concluded for the transfer of use of the administrative buildings used by the Bank. The lease agreement entered into effect mid-January 2020 upon the transfer of the properties to the buyer. The properties were derecognised at the time of transfer and corresponding right-of-use assets in the amount of €32 million and lease liabilities in the amount of €109 million were reported in the consolidated balance sheet of the seller/lessee. In the process, HVB Group recognised the right-of-use asset associated with the lease-back of the property at the portion of the former carrying amount that relates to the right-of-use asset retained by the Group.

HVB Group generated a gain of €504 million on the sale of the properties from the "Am Tucherpark" site, which were subsequently leased back for a transitional period. The right-of-use asset resulting from the subsequent leaseback transaction by HVB Group was recognised at the portion of the former carrying amount so that an amount of €32 million was not generated as a gain on disposal; instead the carrying amount for the addition of the right-of-use asset declined compared to the lease liability. In addition, HVB Group leased back further spaces from the buyer in order to re-let these to UniCredit Services S.C.p.A., Milan under a sublease agreement. The sublease agreement is recognised under investment properties and measured at fair value. A gain of €45 million accrued from the difference between the former carrying amount of €6 million relating to this part of the leaseback agreements and the fair value of the right-of-use asset upon posting.

HVB Group as lessor

The range of lease and hire-purchase products was changed under the "Team23" strategic plan: Instead of the HVB subsidiary UniCredit Leasing offering its own range of products, these are provided by an external cooperation partner. UniCredit Leasing thus ceased to sell lease and hire-purchase products with effect from 1 August 2020. Existing agreements will be continued and existing liabilities will be settled in full. As a result of the discontinuation of these sales, the number of lease agreements has decreased year on year as agreements falling due are not replaced by new business.

According to IFRS 16, the lessor is required to classify leases either as operating leases or finance leases (dual lessor accounting model).

Operating leases
HVB Group acts as lessor in operating leases. These lease agreements mainly include real estate (land and buildings) and movable assets such as plant and office equipment, motor vehicles and industrial machinery. The lease agreements for real estate have terms of between three and five years. These agreements are based on customary market terms and include extension options and price adjustment clauses in the form of stepped rents or index clauses; termination options are not agreed. If the lessee exercises its right to extend the lease agreement, market review clauses are used. By contrast, leases for the lessee do not usually include any option to purchase the leased property at the end of the lease period. Unguaranteed residual values do not represent a significant risk for HVB Group, as these relate to properties that have exhibited a steadily increasing trend in market values over many years. The Bank sees no indication of any future change in this trend. The lease agreements for movable assets are generally concluded for terms of between four and ten years and include an additional purchase option; they do not include extension or price adjustment clauses. No variable leasing payments were agreed by HVB Group as lessor in the concluded operating lease agreements.

The following tables shows the lease income from lessor operating leases in the consolidated income statement during the financial year:

(€ millions)

	2020	2019
Income from operating leases	80	146

The decline in income from operating leases is primarily due to sales of investment properties at year-end 2019.

The following table contains a maturity analysis of undiscounted payments from operating leases that the lessor will receive in the future:

(€ millions)

	2020	2019
up to 1 year	33	84
from 1 year to 2 years	30	32
from 2 years to 3 years	21	31
from 3 years to 4 years	17	24
from 4 years to 5 years	14	20
from 5 years and over	84	91
Total	**199**	**282**

At the end of the reporting period, the carrying amount of the assets included in property, plant and equipment which are the subject of an operating lease amounts to €104 million (previous year: €112 million).

Finance leases
HVB Group acts as a lessor under finance leases and leases out mobile assets. These mainly include plant and office equipment, aircraft, motor vehicles and industrial machinery. As a general rule, the lease agreements stipulate lease periods of between four and ten years and possibly a pre-emptive right in favour of the lessor; they do not contain any extension or price adjustment clauses. The residual risk for these leased assets is insignificant because there is a secondary market. No variable lease payments were agreed by HVB Group as lessor in the finance leases concluded.

Other Information (Continued)

The following table shows the amounts recognised in the consolidated income statement for finance leases held by the lessor during the financial year:

(€ millions)

	2020	2019
Gains/losses on the disposal of finance leases	1	—
Finance income from the net investment in the lease (interest income from finance lease receivables)	19	23

The following table contains a maturity analysis of the lessor's existing loans and receivables with customers and banks (at cost) from the lease operations (receivables under finance leases) and shows the undiscounted lease payments to be received after the reporting date. The subsequent reconciliation to the net investment in the lease makes the unguaranteed residual value and the still unrealised finance income transparent in relation to the receivables from leases:

(€ millions)

	2020	2019
up to 1 year	553	682
from 1 year to 2 years	411	439
from 2 years to 3 years	279	319
from 3 years to 4 years	179	193
from 4 years to 5 years	95	111
from 5 years and over	170	151
Total amount of undiscounted lease payments to be received	**1,687**	**1,895**
+ Unguaranteed residual value	—	—
= Gross investment in the lease	**1,687**	**1,895**
– Unrealised finance income	(72)	(79)
= Net investment in the lease (finance lease receivables)	**1,615**	**1,816**

The overall amount of discounted lease payments encompasses the payments to be made by the lessee to the lessor in the finance lease including any residual value guarantees.

Guaranteed residual value is that part of the residual value of the underlying asset whose realisation is not secured by the lessor.

Gross investment in the lease is the sum of the lease payments and the unguaranteed residual value.

Unrealised finance income is the difference between the lessor's gross investment in the lease and its present value (net investment). It corresponds to the return implicit in the lease between the reporting date and the end of the lease.

The net investment in the lease (receivables under finance leases) is therefore determined by discounting the gross investment with the interest rate on which the lease is based.

For receivables under finance leases in the item “Loans and receivables from customers (at cost)”, the changes in gross carrying amounts and impairments as well as the breakdown by rating classes are shown below (see also Note “Loans and receivables from customers (at cost)”):

Changes in gross carrying amounts: (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2020	**1,127**	**654**	**35**	**—**	**1,816**
Addition due to new business	161	307	—	—	468
Change in balance within the stage	(299)	(352)	(5)	—	(656)
Transfer to another stage due to deterioration					
in credit quality	(473)	457	16	—	—
from Stage 1 to Stage 2	(462)	462	—	—	—
from Stage 2 to Stage 3	—	(5)	5	—	—
from Stage 1 to Stage 3	(11)	—	11	—	—
Transfer to another stage due to improvement					
in credit quality	49	(49)	—	—	—
from Stage 2 to Stage 1	49	(49)	—	—	—
from Stage 3 to Stage 2	—	—	—	—	—
from Stage 3 to Stage 1	—	—	—	—	—
Increase reported directly in equity in gross carrying amounts for					
interest claims not recognised in profit or loss	—	—	—	—	—
Changes due to modification of assets, not leading					
to derecognition	—	—	—	—	—
Derecognition	—	—	(13)	—	(13)
Foreign currency movements and other changes	—	—	—	—	—
Balance at 31/12/2020	**565**	**1,017**	**33**	**—**	**1,615**
Balance at 1/1/2019	**1,216**	**642**	**41**	**—**	**1,899**
Change in balance within the stage (including additions from					
new business and disposals)	46	(108)	(21)	—	(83)
Transfer to another stage due to deterioration					
in credit quality	(206)	189	17	—	—
from Stage 1 to Stage 2	(197)	197	—	—	—
from Stage 2 to Stage 3	—	(8)	8	—	—
from Stage 1 to Stage 3	(9)	—	9	—	—
Transfer to another stage due to improvement					
in credit quality	71	(69)	(2)	—	—
from Stage 2 to Stage 1	70	(70)	—	—	—
from Stage 3 to Stage 2	—	1	(1)	—	—
from Stage 3 to Stage 1	1	—	(1)	—	—
Increase reported directly in equity in gross carrying amounts for					
interest claims not recognised in profit or loss	—	—	—	—	—
Changes due to modification of assets, not leading					
to derecognition	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 31/12/2019	**1,127**	**654**	**35**	**—**	**1,816**

Other Information (Continued)

Changes in impairments:

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2020	**5**	**8**	**14**	**—**	**27**
Addition due to new business	1	3	—	—	4
Change in balance within the same stage	10	(1)	(2)	—	7
Transfers to another stage due to deterioration					
in credit quality	(14)	9	5	—	—
from Stage 1 to Stage 2	(10)	10	—	—	—
from Stage 2 to Stage 3	—	(1)	1	—	—
from Stage 1 to Stage 3	(4)	—	4	—	—
Transfers to another stage due to improvement					
in credit quality	—	—	—	—	—
from Stage 2 to Stage 1	—	—	—	—	—
from Stage 3 to Stage 2	—	—	—	—	—
from Stage 3 to Stage 1	—	—	—	—	—
Increase in impairment reported directly in equity for					
interest claims not recognised in profit or loss	—	—	—	—	—
Changes due to modification of assets, not leading					
to derecognition	—	—	—	—	—
Disposals (reversal due to disposal of receivable)	—	—	—	—	—
Disposals (utilisation of impairments)	—	—	(4)	—	(4)
Reversal of the discounted amount and receipt of interest claims					
not previously recognised in profit or loss	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 31/12/2020	**2**	**19**	**13**	**—**	**34**
Balance at 1/1/2019	**4**	**6**	**15**	**—**	**25**
Addition due to new business	2	2	1	—	5
Change in balance within the same stage (netted)[1]	(1)	—	(1)	—	(2)
Increase in impairment reported directly in equity for					
interest claims not recognised in profit or loss	—	—	—	—	—
Changes due to modification of assets, not leading					
to derecognition	—	—	—	—	—
Disposals (reversal due to disposal of receivable)	—	—	—	—	—
Disposals (utilisation of impairments)	—	—	(1)	—	(1)
Reversal of the discounted amount and receipt of interest					
claims not previously recognised in profit or loss	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 31/12/2019	**5**	**8**	**14**	**—**	**27**

1 Transfers between the individual stages are shown here (disposal at the previous stage, addition at the new stage).

Breakdown by rating class:

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	COLLATERAL	TOTAL
31/12/2020						
Not rated	—	—	—	—	—	—
Rating class 1–4	534	790	—	—	836	1,324
Rating class 5–8	31	227	—	—	163	258
Rating class 9–10	—	—	33	—	15	33
Gross carrying amount at 31/12/2020	**565**	**1,017**	**33**	**—**	**1,014**	**1,615**
Impairment	(2)	(19)	(13)	—	—	(34)
Net carrying amount at 31/12/2020	**563**	**998**	**20**	**—**	**1,014**	**1,581**
31/12/2019						
Not rated	—	—	—	—	—	—
Rating class 1–4	1,060	541	—	—	1,009	1,601
Rating class 5–8	67	113	—	—	104	180
Rating class 9–10	—	—	35	—	14	35
Gross carrying amount at 31/12/2019	**1,127**	**654**	**35**	**—**	**1,127**	**1,816**
Impairment	(5)	(8)	(14)	—	—	(27)
Net carrying amount at 31/12/2019	**1,122**	**646**	**21**	**—**	**1,127**	**1,789**

Other Information (Continued)

79 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 €1,099 million (previous year: €652 million) were transferred between Level 1 and Level 2. At the same time, financial assets or liabilities of €2,250 million (previous year: €2,317 million) were transferred between Level 2 and Level 1. Most of the transfers relate to securities, resulting 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	—	102
	Transfer from Level 2	409	—
Financial assets at FVTPL			
	Transfer from Level 1	—	604
	Transfer from Level 2	714	—
Financial assets at FVTOCI			
	Transfer from Level 1	—	393
	Transfer from Level 2	1,122	—
Financial liabilities held for trading			
	Transfer from Level 1	—	—
	Transfer from Level 2	5	—
Financial liabilities at FVTPL			
	Transfer from Level 1	—	—
	Transfer from Level 2	—	—

1 January is considered the transfer date for instruments transferred between the levels in the reporting period (1 January to 31 December).

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, when the annual financial statements are prepared. 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–391bps
Equities	Market approach	Price	0%–3%
Asset-backed securities (ABS)	DCF method	Credit spread curves	16bps–663bps
		Residual value	0%–24%
		Default rate	0%–1.28%
		Prepayment rate	0%–5%
Commodity/equity derivatives	Option price model	Commodity price volatility/equity volatility	2%–20%
		Correlation between commodity/equities	2%–24%
	DCF method	Dividend yields	1%–18%
Interest rate derivatives	DCF method	Swap interest rate	0bps–36bps
		Inflation swap interest rate	3bps–6bps
	Option price model	Inflation volatility	0%–2%
		Interest rate volatility	2%–35%
		Correlation between interest rates	0%–20%
Credit derivatives	Hazard rate model	Credit spread curves	1bps–73bps
		Residual value	0%–5%
Currency derivatives	DCF method	Yield curves	0bps–36bps
	Option price model	FX volatility	0%–27%

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 unobservable 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 €32 million respectively at the reporting date (previous year: a plus or minus of €37 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)

	2020		2019	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
Fixed-income securities and other debt instruments	—	—	—	—
Equities	—	—	—	—
Asset-backed securities	—	—	—	—
Commodity/equity derivatives	29	(29)	27	(27)
Interest rate derivatives	—	—	—	—
Credit derivatives	3	(3)	10	(10)
Currency derivatives	—	—	—	—
Total	**32**	**(32)**	**37**	**(37)**

Other Information (Continued)

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 (stress test) 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, rating-dependent 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.

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)

	2020	2019
Balance at 1/1	**14**	**18**
New trades during the period	14	6
Write-downs	4	6
Expired trades	1	—
Retroactive change in observability	5	4
Exchange rate changes	—	—
Balance at 31/12	**18**	**14**

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)	
	31/12/2020	31/12/2019	31/12/2020	31/12/2019	31/12/2020	31/12/2019
Financial assets recognised						
in the balance sheet at fair value						
Financial assets held for trading	19,406	16,184	61,979	52,443	1,320	1,226
of which derivatives	4,058	2,470	51,702	43,949	592	468
Financial assets at FVTPL	5,560	7,746	5,563	6,783	321	945
Financial assets at FVTOCI	10,243	11,830	2,228	2,843	—	—
Hedging derivatives	—	—	372	264	—	—
Financial liabilities recognised						
in the balance sheet at fair value						
Financial liabilities held for trading	8,004	4,397	48,044	41,429	903	839
of which derivatives	4,717	2,794	42,442	37,900	488	507
Financial liabilities at FVTPL	—	—	5,375	5,604	361	332
Hedging derivatives	—	—	734	813	—	—

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 1/1/2020	**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**	**—**	**—**
Balance at 1/1/2019	**1,961**	**875**	**—**	**—**
Additions				
Purchases	373	537	—	—
Realised gains[1]	53	81	—	—
Transfer from other levels	21	13	—	—
Other additions[2]	27	35	—	—
Disposals				
Sales	(914)	(16)	—	—
Repayment	—	(539)	—	—
Realised losses[1]	(71)	(30)	—	—
Transfer to other levels	(207)	(7)	—	—
Other disposals	(17)	(4)	—	—
Balance at 31/12/2019	**1,226**	**945**	**—**	**—**

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 are due in particular to novations in equity derivatives and the sale of asset-backed securities (ABS). Further disposals are primarily attributable to the transfer of syndicated loans and the sale of fund units.

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	
	2020	2019	2020	2019	2020	2019
Balance at 1/1	**839**	**1,250**	**332**	**203**	**—**	**—**
Reclassification of financial liabilities held for						
trading to financial liabilities at FVTPL	—	—	—	—	—	—
Balance at 1/1 (after reclassification)	**839**	**1,250**	**332**	**203**	**—**	**—**
Additions						
Sales	158	315	—	—	—	—
Issues	155	179	172	208	—	—
Realised losses[1]	88	102	16	4	—	—
Transfer from other levels	63	46	31	97	—	—
Other additions[2]	19	9	4	4	—	—
Disposals						
Buy-back	(117)	(642)	(32)	(9)	—	—
Repayment	(23)	(24)	(80)	(40)	—	—
Realised gains[1]	(90)	(42)	(24)	(6)	—	—
Transfer to other levels	(174)	(343)	(52)	(127)	—	—
Other disposals	(15)	(11)	(6)	(2)	—	—
Balance at 31/12	**903**	**839**	**361**	**332**	**—**	**—**

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.

80 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. In turn, the risk-neutral probability of default is determined on the basis of the internally calculated one-year default rate (real-world probability of default), the market risk premium and the correlation between the respective loan and the general market risk. 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 now 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. In order to calculate the sensitivity, the internal parameter is now replaced with the value with the highest deviation in the estimated range, and based on that figure the fair value is 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.

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.

Other Information (Continued)

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

(€ billions)

ASSETS	CARRYING AMOUNT 2020	CARRYING AMOUNT 2019	FAIR VALUE 2020	FAIR VALUE 2019
Cash and cash balances	47.5	26.2	47.5	26.2
Financial assets held for trading	82.7	69.9	82.7	69.9
Financial assets at FVTPL	11.4	15.5	11.4	15.5
Financial assets at FVTOCI	12.5	14.7	12.5	14.7
Loans and receivables with banks (at cost)	34.0	31.8	34.3	31.5
Loans and receivables with customers (at cost)	144.2	139.6	154.4	143.5
of which finance leases	1.6	1.8	1.6	1.8
Hedging derivatives	0.4	0.3	0.4	0.3
Total	**332.7**	**298.0**	**343.2**	**301.6**

(€ billions)

ASSETS	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1) 2020	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1) 2019	FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2) 2020	FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2) 2019	FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3) 2020	FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3) 2019
Financial assets not carried at fair value						
in the balance sheet						
Cash and cash balances	—	—	47.5	26.2	—	—
Loans and receivables with banks (at cost)	1.4	0.4	31.0	29.6	1.9	1.5
Loans and receivables with customers (at cost)	10.2	1.4	65.2	73.1	79.0	69.0
of which finance leases	—	—	—	—	1.6	1.8

(€ billions)

LIABILITIES	CARRYING AMOUNT 2020	CARRYING AMOUNT 2019	FAIR VALUE 2020	FAIR VALUE 2019
Deposits from banks	73.5	70.3	73.9	70.2
Deposits from customers	143.8	125.4	145.5	125.6
Debt securities in issue	31.7	28.3	34.1	30.7
Financial liabilities held for trading	57.0	46.7	57.0	46.7
Financial liabilities at FVTPL	5.7	5.9	5.7	5.9
Hedging derivatives	0.7	0.8	0.7	0.8
Total	**312.4**	**277.4**	**316.9**	**279.9**

(€ billions)

LIABILITIES	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1) 2020	2019	FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2) 2020	2019	FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3) 2020	2019
Financial liabilities not carried at fair value						
in the balance sheet						
Deposits from banks	—	0.1	62.0	55.9	11.9	14.2
Deposits from customers	—	—	138.8	121.8	6.7	3.8
Debt securities in issue	12.9	9.5	7.0	6.5	14.2	14.7

The difference in HVB Group between the fair values and carrying amounts totals €10.5 billion (previous year: €3.6 billion) for assets and €4.5 billion (previous year: €2.5 billion) for liabilities. The net balance of these amounts is €6.0 billion (previous year: €1.1 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.

81 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)

	FINANCIAL ASSETS (GROSS)	FINANCIAL LIABILITIES NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED FINANCIAL ASSETS (NET)	AMOUNTS NOT RECOGNISED: EFFECTS OF MASTER NETTING ARRANGE-MENTS	AMOUNTS NOT RECOGNISED: FINANCIAL INSTRUMENTS AS COLLATERAL	AMOUNTS NOT RECOGNISED: CASH COLLATERAL	NET AMOUNT
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**
Derivatives[1]	76,042	(28,891)	47,151	(27,661)	(114)	(10,232)	9,144
Reverse repos[2]	24,725	(3,875)	20,850	—	(20,386)	—	464
Loans and receivables[3]	90,065	(3,639)	86,426	—	—	—	86,426
Total at 31/12/2019	**190,832**	**(36,405)**	**154,427**	**(27,661)**	**(20,500)**	**(10,232)**	**96,034**

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 €4,643 million (previous year: €1,888 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)”.

Other Information (Continued)

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

(€ millions)

	FINANCIAL LIABILITIES (GROSS)	FINANCIAL ASSETS NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED LIABILITIES (NET)	AMOUNTS NOT RECOGNISED			NET AMOUNT
				EFFECTS OF MASTER NETTING ARRANGE-MENTS	FINANCIAL INSTRUMENTS AS COLLATERAL	CASH COLLATERAL	
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**
Derivatives[1]	72,693	(30,679)	42,014	(27,661)	(527)	(10,140)	3,686
Reverse repos[2]	29,986	(3,875)	26,111	—	(26,111)	—	—
Liabilities[3]	112,449	(1,850)	110,599	—	—	—	110,599
Total at 31/12/2019	**215,128**	**(36,404)**	**178,724**	**(27,661)**	**(26,638)**	**(10,140)**	**114,285**

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 €2,597 million (previous year: €540 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 notes loans and receivables with banks (at cost), loans and receivables with customers (at cost), deposits from banks and deposits from customers.

82 Undiscounted cash flow

Compliant with IFRS 7.39, we are disclosing the remaining terms for non-derivative and derivative financial liabilities and for credit commitments and financial guarantees. The breakdown of remaining terms is based on the contractual due dates. These are relevant for determining the timing of payments. We have thus divided the contractually agreed, undiscounted payments into maturity buckets. The undiscounted cash flows shown here cannot be compared with the carrying amounts, as the latter are based on discounted cash flows.

In this context, we have also broken down the financial assets by remaining term compliant with IFRS 7.39. These are financial assets that generate the cash flows used to settle financial liabilities.

In the following tables, we have divided the derivative and non-derivative financial assets and liabilities into maturity buckets. In doing so, all the financial liabilities are allocated to the respective maturity bucket. The derivatives on financial assets held for trading and financial liabilities held for trading are allocated to the shortest maturity bucket at their fair value. This is due to the fact that the derivatives are subject to an intention to sell in the short term and hence the maturity of the contractual undiscounted cash flows does not adequately reflect the timing of payments actually expected. The remaining financial instruments classified as financial assets held for trading and financial liabilities held for trading are allocated to the earliest possible maturity bucket in the amount of their cash flows. Hedging derivatives used under hedge accounting are allocated to the applicable maturity bucket in the amount of their contractually agreed, undiscounted cash flows.

Credit commitments and financial guarantees are allocated at the maximum amount to the shortest maturity bucket (repayable on demand) in which they can be utilised at the earliest. This assumption defined in IFRS 7 is unrealistic for unutilised credit commitments and contingent liabilities for financial guarantees in particular, as the complete utilisation of all open credit commitments and financial guarantees on the next day cannot be expected. The same applies to the presentation of the fair values of trading derivatives.

Breakdown of financial assets by maturity bucket: (€ millions)

	2020						
	REPAYABLE ON DEMAND	UP TO 1 MONTH	1 MONTH TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	UNDATED
Financial assets held for trading	229	6,785	301	4,244	3,423	3,162	5,061
Derivatives on financial assets held for trading	56,352	—	—	—	—	—	—
Financial assets at FVTPL	8	107	581	1,732	6,124	2,948	36
Financial assets at FVTOCI	—	19	8	802	8,372	3,169	—
Loans and receivables with banks (at cost)	10,419	11,258	4,504	3,413	10,193	8,244	12,757
Loans and receivables with customers (at cost)	15,140	8,449	11,185	16,398	55,150	64,233	65
of which finance leases	32	36	96	374	925	170	—
Hedging derivatives	—	330	660	2,971	3,316	2,414	—

(€ millions)

	2019						
	REPAYABLE ON DEMAND	UP TO 1 MONTH	1 MONTH TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	UNDATED
Financial assets held for trading	285	5,612	1,037	2,542	3,994	2,900	5,033
Derivatives on financial assets held for trading	46,887	—	—	—	—	—	—
Financial assets at FVTPL	1	178	228	2,020	10,497	2,760	803
Financial assets at FVTOCI	—	415	7	232	10,785	3,392	—
Loans and receivables with banks (at cost)	12,171	3,826	7,472	6,312	5,522	6,764	16,118
Loans and receivables with customers (at cost)	16,732	10,496	7,072	12,213	53,740	64,741	161
of which finance leases	25	52	139	462	1,047	150	3
Hedging derivatives	—	377	754	3,394	3,609	1,974	—

Other Information (Continued)

Breakdown of non-derivative and derivative financial liabilities by maturity bucket:

(€ millions)

	2020						
	REPAYABLE ON DEMAND	UP TO 1 MONTH	1 MONTH TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	UNDATED
Deposits from banks	13,545	15,063	5,158	2,875	35,188	6,485	141
Deposits from customers	107,248	15,289	16,765	7,525	4,377	1,151	—
Debt securities in issue	20	113	5,450	3,509	11,940	26,817	—
Financial liabilities held for trading	708	3,294	1,408	298	1,514	2,002	2,780
Financial liabilities at FVTPL	—	151	55	244	928	1,657	2,482
Derivatives on financial liabilities held for trading	47,647	—	—	—	—	—	—
Hedging derivatives	—	355	710	3,196	1,947	888	—
Credit commitments and financial guarantees	85,694	—	—	—	—	—	—

(€ millions)

	2019						
	REPAYABLE ON DEMAND	UP TO 1 MONTH	1 MONTH TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	UNDATED
Deposits from banks	13,619	21,511	9,653	11,699	12,640	7,175	7
Deposits from customers	91,382	10,052	15,907	9,614	4,726	1,425	—
Debt securities in issue	20	231	296	3,133	13,465	21,639	—
Financial liabilities held for trading	62	601	3,163	422	1,519	1,434	2,091
Financial liabilities at FVTPL	—	21	86	398	1,304	204	2,987
Derivatives on financial liabilities held for trading	41,201	—	—	—	—	—	—
Hedging derivatives	—	390	780	3,508	2,335	626	—
Credit commitments and financial guarantees	77,743	—	—	—	—	—	—

83 Regulatory disclosure requirements (Disclosure Report)

HVB has been classified as a significant subsidiary of UniCredit S.p.A. within the meaning of Article 13 (1) of the Capital Requirements Regulation (CRR), making it subject to the scope of the CRR (Article 13 (1) and Part 8 CRR) and certain extended regulatory disclosure requirements in accordance with Section 26a KWG (disclosure under Pillar III).

HVB discloses this information on a standalone basis in the form of a separate disclosure report. This report is produced on an annual basis as at 31 December and at each quarter-end during the year and published on the Bank's website under About us > Investor Relations > Reports. The publication for the reporting date of 31 December is scheduled for shortly after the publication of the Annual Report. The interim reports should be published shortly after submission of the regulatory COREP report to the supervisory authorities responsible.

The disclosure of the remuneration policy and practices for those categories of staff whose professional activities have a material impact on the Bank's risk profile (known as "risk takers") required by Article 450 CRR in conjunction with Section 16 (1) of the German Regulation on the Requirements for the Remuneration Systems of Institutions under Regulatory Law (Institutsvergütungsverordnung) takes the form of a separate report for HVB. This is drawn up once a year as at 31 December and published on the Bank's website under About us > Investor Relations > Corporate Governance in the second quarter of the following year.

84 Key capital ratios (based on IFRS)

HVB Group manages its economic and supervisory capital as part of its value-oriented overall bank management strategy. The yield expectations are calculated in accordance with the allocated capital principle that UniCredit employs across its entire organisation. Under the principle of dual control, both regulatory capital in the sense of committed core capital and internal capital are allocated to the business segments. Both resources are expected to yield an appropriate return, which is derived from the expectations of the capital market. Please refer to the section of the Risk Report entitled "Implementation of overall bank management" for further details on the management of regulatory capital adequacy requirements and economic capital adequacy.

The supervisory ratios are discussed below.

The legal basis is provided by the EU Regulation on Prudential Requirements for Credit Institutions and Investment Firms (CRR), which came into force on 1 January 2014. The supervisory total capital ratio prescribed in the CRR II represents the capital ratio determined in accordance with Part 2 CRR II to the total amount of the risk-weighted assets for default risk, market risk and operational risk (corresponds to the risk-weighted asset equivalent of these risk positions). Under Article 92 CRR II, the Tier 1 capital ratio calculated as the ratio of Tier 1 capital to total risk-weighted assets determined as described above must be at least 6.0%.

Own funds underlying the calculation of the total capital ratio in accordance with CRR II consists of Tier 1 and Tier 2 capital. Under Article 92 CRR II, the total capital ratio calculated as the ratio of own funds to total risk-weighted assets must be at least 8.0%. HVB Group uses internal models in particular to measure market risk positions.

The following table shows own funds based on the approved consolidated financial statements and risk-weighted assets together with the risk equivalents for market risk positions and operational risk at the reporting date:

Own funds[1]

(€ millions)

	2020	2019
Tier 1 – Total core capital for solvency purposes	**16,822**	**14,987**
Shares of common stock	2,407	2,407
Additional paid-in capital, retained earnings, minority interest, own shares	14,590	14,176
Hybrid capital instruments (silent partnership certificates) without prorated interest	—	—
Other	(1,426)	(1,165)
Capital deductions	(449)	(431)
Additional Tier 1 capital	1,700	—
Tier 2 – Total supplementary capital for solvency purposes	**1,309**	**504**
Unrealised reserves in land and buildings and in securities	—	—
Offsetting reserves for general banking risks	—	—
Cumulative shares of preferred stock	—	—
Participating certificates outstanding	—	—
Subordinated liabilities	1,151	326
Value adjustment excess for A-IRB positions	158	178
Other	—	—
Capital deductions	—	—
Total own funds	**18,131**	**15,491**

1 Group of consolidated companies and principles of consolidation in accordance with banking supervisory regulations.

As in the previous year, we have not included in Tier 2 capital any unrealised reserves in accordance with Section 10 (2b) 1 No. 6 and 7 KWG in the version applicable until 31 December 2013.

The own funds are determined on the basis of IFRS figures in accordance with CRR II/CRD V using the consolidated accounting method.

Other Information (Continued)

The following table shows the reconciliation from the equity items shown in the balance sheet prepared in accordance with IFRS: (€ millions)

	COMMON EQUITY TIER 1 CAPITAL	ADDITIONAL TIER 1 CAPITAL	TIER 2 CAPITAL	TOTAL OWN FUNDS
Shown in IFRS balance sheet				
Shareholders' equity	16,175	1,700	—	17,875
Reconciliation to own funds compliant with CRR				
Cumulative shares of preferred stock	—	—	—	—
Ineligible profit components	(400)	—	—	(400)
Ineligible minority interests under banking supervisory regulations	10	—	—	10
Diverging consolidation perimeters	(214)	—	—	(214)
Deduction of intangible assets	(20)	—	—	(20)
Hybrid capital recognised under banking supervisory regulations	—	—	—	—
Eligible portion of subordinated liabilities	—	—	1,152	1,152
Value adjustment excess (+) or shortfall (–) for A-IRB positions	—	—	157	157
Adjustments to CET1 due to prudential filters	(212)	—	—	(212)
Deductible deferred tax assets	(51)	—	—	(51)
Capital deductions which can alternatively be subject to a 1,250% risk weight	(1)	—	—	(1)
Transitional adjustments	—	—	—	—
Other effects	(165)	—	—	(165)
Own funds compliant with CRR II	**15,122**	**1,700**	**1,309**	**18,131**

(€ millions)

	2020 CRR II	2019 CRR
Risk-weighted assets from		
on-balance-sheet counterparty risk positions	40,384	45,151
off-balance-sheet counterparty risk positions	16,287	14,717
other counterparty risk positions[1]	443	1,533
derivative counterparty risk positions	5,271	4,194
other risk exposure amounts[2]	501	516
Total credit risk-weighted assets	**62,886**	**66,111**
Risk-weighted asset equivalent for market risk positions	**9,053**	**10,172**
Risk-weighted asset equivalent for operational risk	**8,698**	**9,172**
Total risk-weighted assets	**80,637**	**85,455**

1 Primarily including repos and securities lending transactions.
2 Upon the introduction of the "Defaulted Assets Model", a lower RWA limit was imposed on UCB AG for default losses in the retail/corporate portfolio. If the calculated risk-weighted assets are below the lower RWA limit for the default losses in the retail/corporate portfolio, the difference is shown in this item.

At the respective reporting dates, the key capital ratios (based on the approved consolidated financial statements) were as follows: (in %)

	2020 CRR II	2019 CRR
Tier 1 capital ratio		
[Tier 1 capital/(credit risk-weighted assets + 12.5x market risk positions + 12.5x operational risk)]	20.9	17.5
CET1 capital ratio		
[Common Equity Tier 1 capital/(credit risk-weighted assets + 12.5x market risk positions + 12.5x operational risk)]	18.8	17.5
Total capital ratio		
[own funds/(credit risk-weighted assets + 12.5x market risk positions + 12.5x operational risk)]	22.5	18.1

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

(€ millions)

	2020		2019	
	CARRYING AMOUNT	OF WHICH: TRANSFERRED AS COLLATERAL	CARRYING AMOUNT	OF WHICH: TRANSFERRED AS COLLATERAL
Financial assets held for trading	82,705	2,599	69,853	1,718
Financial assets at FVTPL	11,444	865	15,474	1,662
Financial assets at FVTOCI	12,471	2,069	14,673	1,515
Loans and receivables with banks (at cost)	33,973	11	31,842	—
Loans and receivables with customers (at cost)	144,247	875	139,632	1,025
Total	**284,840**	**6,419**	**271,474**	**5,920**

86 Contingent liabilities and other commitments

(€ millions)

	2020	2019
Contingent liabilities[1]	24,588	25,707
Guarantees and indemnities	24,588	25,707
Other commitments	60,689	51,835
Irrevocable credit commitments	60,674	51,811
Other commitments	15	24
Total	**85,277**	**77,542**

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

Financial guarantees and irrevocable credit commitments are shown at their nominal amount (maximum outflow) less provisions set aside for this purpose. Neither contingent liabilities nor other commitments contain any significant items. The financial guarantees and indemnities listed here essentially reflect guarantees and indemnities that the Bank has granted on behalf of customers. Consequently, the Bank has a right of recourse against the customer (contracting party) should the guarantee or indemnity in question be used. An appropriate provision is set aside where such a customer's creditworthiness is doubtful. This takes account of the loss suffered by the Bank if the recourse claim against the contracting party is not considered fully realisable on account of the party's doubtful creditworthiness.

It is hard to anticipate the date at which the contingent liabilities and other commitments mentioned here will result in an outflow of funds. Credit commitments frequently serve as liquidity reserve for the beneficiary in particular, meaning that the amounts are not necessarily utilised at all and hence an outflow of funds is not certain. In terms of financial guarantees, it is important to note that these are conditional payment commitments so that the condition must be met before utilisation becomes possible (such as default on the guaranteed credit in the case of a credit guarantee or non-compliant delivery in the case of a delivery guarantee). Here, too, it is hard to assess whether and when this will be the case, as financial guarantees in particular are only ever utilised in exceptional circumstances entailing an outflow of funds.

Securities lending transactions are not recognised in the balance sheet, as economic ownership remains with the lender. The Bank only becomes the legal owner of the borrowed securities which are returned to the lender, when the lending transaction falls due. Obligations of €8,990 million (previous year: €14,449 million) to return securities arising from securities lending transactions are thus offset by borrowed securities of the same amount, which are not carried as assets on the assets side of the balance sheet.

Other Information (Continued)

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: €82 million).

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: €30 million).

Legal risks can give rise to losses for HVB, the occurrence of which is greater than improbable but less than probable, and for which no provisions have been set aside. Such legal risks may result from negative developments in civil-law proceedings and the tendency for rulings to be made in favour of consumers or customers. The assessment of the risk of loss may prove to be too low or too high, depending on the outcome of the proceedings. HVB assumes that it will not be necessary to utilise the vast majority of the contingent liabilities arising from legal risks, meaning that the amounts are not representative of actual future losses. Such contingent liabilities arising from significant legal risks for which an estimate is possible amounted to €54 million at year-end 2020 after €91 million at year-end 2019.

As part of real estate financing and development operations, we have assumed rental obligations and pre-emptive obligations or issued rental guarantees to make fund constructions more marketable – in particular for lease funds and (closed-end) KG real estate funds. Identifiable risks arising from such guarantees have been incorporated by setting aside provisions.

Commitments for uncalled payments on shares not fully paid up amounted to €15 million at the reporting date (previous year: €24 million), and similar obligations for shares in cooperatives totalled €1 thousand (previous year: €1 thousand). We were not liable for any defaults on such calls under Section 22 (3 and 24) of the German Private Limited Companies Act (Gesetz betreffend die Gesellschaften mit beschränkter Haftung – GmbHG).

At the reporting date, we had unlimited personal liability arising from ownership of shares in 64 partnerships (previous year: 60).

With a Statement of Responsibility dated 21 December 1993, HVB issued an undertaking to the State of Baden-Wuerttemberg (Ministry of Finance) to assume a liquidity provision obligation in the event of the sale, liquidation or bankruptcy of HVB Projekt GmbH.

UniCredit Bank AG assumes liability as a member of the deposit guarantee funds in Germany within the scope of the valid provisions.

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 extends to certain periods from 2007 to 2012, and includes alleged activities by HVB in a part of this period. The Statement of Objections does not prejudge the outcome of the proceeding; should the Commission conclude that there is sufficient evidence of an infringement, a decision prohibiting the conduct and imposing a fine could be adopted, with any fine subject to a statutory maximum of 10% of company's annual worldwide turnover.

HVB had access to the entirety of the European Commission's file on the investigation from 15 February 2019 onwards. As a result of the assessment of the files, the Bank regards it no longer remote but possible, even though not likely, that a cash outflow might be required to fulfil a potential fine arising from the outcome of the investigation. On the basis of the current information, it is not possible to reliably estimate the amount of any potential fine at the present date.

UniCredit S. p. A. and HVB have responded to the raised objections on 29 April 2019 and participated in a hearing before the European Commission on 22–24 October 2019. Proceedings are ongoing. There is no legal deadline for the Commission to complete antitrust inquiries.

On 11 June 2019, HVB and UniCredit Capital Markets LLC were named, among other financial institutions, as defendants in a putative class action already pending in the United States District Court for the Southern District of New York. The third amended class action complaint, filed on 3 December 2019, alleges a conspiracy among dealers of Euro-denominated bonds issued by European central banks to fix and manipulate the prices of those bonds, among other things by widening the bid-ask spreads they quoted to customers. The putative class consists of those who purchased or sold Euro-denominated bonds issued by European central banks in the US between 2007 and 2012. On 23 July 2020, the court granted motions to dismiss the third amended complaint by certain defendants, including HVB and UniCredit Capital Markets LLC, without prejudice. Plaintiffs filed their fourth amended class action complaint on 9 February 2021, repleading their claim against HVB and UniCredit Capital Markets LLC and other financial institutions. Like earlier pleadings, the fourth amended class action complaint does not include a quantification of damages claimed. Exchange of correspondence concerning motions to dismiss the fourth amended complaint is scheduled to commence in March 2021.

Contingent liabilities payable to related parties (€ millions)

	2020	2019
Non-consolidated affiliates	1,952	1,848
of which:		
UniCredit S. p. A.	1,163	1,037
sister companies	774	811
subsidiaries	15	—
Joint ventures	—	26
Associates	7	—
Other investees	47	33
Total	**2,006**	**1,907**

87 Statement of Responsibility

HVB ensures that, to the extent of its shareholding, the company set forth below is in a position to meet its contractual obligations except in the event of political risks:

Financial companies
UniCredit Leasing GmbH, Hamburg

HVB's commitment arising from the above Statement of Responsibility declines to the extent as HVB's shareholding decreases in the future with regard to those contractual obligations of the company that were established only after HVB's shareholding decreased. In case HVB is no longer a shareholder in the company listed above, our commitment arising from the above Statement of Responsibility with regard to such liabilities of the company that were established only after our shareholding ceased ends on the date on which our shareholding ceased.

HVB no longer provides a Statement of Responsibility for companies for which a Statement of Responsibility had been provided in earlier annual reports but which no longer appear in the above list. Liabilities of these companies arising before the reduction or cessation of the shareholding are only covered by such Statements of Responsibility that were provided before the reduction or cessation of the shareholding in each case.

Other Information (Continued)

88 Disclosures regarding structured entities

A structured entity as defined in IFRS 12 is an enterprise (or an economically separate entity) that has been designed so that voting rights or similar rights are not the dominant factor in deciding who controls the entity. Structured entities are frequently characterised by restricted activities, a narrow, well-defined objective, insufficient equity or financing in tranches.

Structured entities may be consolidated or not consolidated, depending on whether HVB Group has control over the entity or not. Transactions involving structured entities can be divided into the following categories using the business model applied by HVB Group:

– ABS vehicles
– Repackaging vehicles
– Funding vehicles for customers
– Some investment funds
– Other structured entities

Financial instruments with unconsolidated structured entities

Financial instruments with unconsolidated structured entities encompass all contractual relationships from which HVB Group obtains variable earnings and exposure to loss from the structured entities, but without gaining control over the structured entity. These might be equity and debt instruments, derivatives, liquidity facilities or guarantees.

ABS vehicles

HVB Group invests in ABS vehicles and uses ABS vehicles for its own securitisations. These vehicles buy loans or receivables and refinance themselves by issuing securities on the money or capital market. The securities are backed by the assets purchased. HVB Group can also provide finance for these vehicles in the form of liquidity facilities.

ABS vehicles used for own securitisations are fully consolidated in the consolidated financial statements and are not included in the unconsolidated structured entities shown here. This means that only such ABS vehicles in which HVB Group solely has an interest as an investor are classified as unconsolidated structured entities.

	2020	2019
Number of unconsolidated ABS vehicles (investor positions only)	211	230

Repackaging vehicles

Repackaging vehicles are used to offer customers specific securities and derivatives solutions. These vehicles buy assets (such as securities, loans and receivables, and derivatives) and restructure the cash flows from these assets by incorporating other instruments or securities. The vehicles refinance themselves by issuing custom-packaged securities or derivatives that meet the customer’s demands. The funding is normally secured by the acquired assets.

	2020	2019
Number of unconsolidated repackaging vehicles	2	1
Aggregate total assets of unconsolidated repackaging vehicles (€ millions)	57	7
Nominal value of the securities issued by unconsolidated repackaging vehicles (€ millions)	57	7

Funding vehicles for customers

Customers use these vehicles as a source of funding. These funding vehicles buy current receivables or lease receivables from customers and refinance themselves mostly by issuing securities on the capital and money market (mostly commercial paper conduits). HVB Group can also provide financing for these vehicles in the form of liquidity facilities or other lending products. The majority of the vehicles listed below were set up by the customer or by HVB Group on behalf of the customer. These vehicles are not consolidated as HVB Group is not exposed to a majority of the variable income from the vehicles and has no possibility of influencing them.

	2020	2019
Number of unconsolidated funding vehicles for customers	44	40
Aggregate total assets of unconsolidated funding vehicles for customers (€ millions)	5,623	8,595
Nominal value of the securities issued by unconsolidated funding vehicles		
for customers (€ millions)	5,622	8,591

Some investment funds

Investment funds are classified as structured entities if they are not controlled by means of voting or similar rights. Investment funds invest in a range of assets and can also finance themselves with debt within the framework of their investment policies alongside the moneys provided by investors. Investment funds serve to achieve specifically defined investment goals.

HVB Group offers its customers investment funds under own and third party management and also itself invests in investment funds. We are also mandated by customers to keep shares in investment funds in securities accounts for third party account. Furthermore, HVB Group holds shares in investment funds in its own portfolio. These are mostly held in the held-for-trading portfolio and to a much smaller extent also in the portfolio at FVTPL. In addition, we offer typical banking services to investment funds, including derivative and financing solutions and deposit-taking operations.

The European-Office-Fonds investment fund controlled by HVB Group is fully consolidated in the consolidated financial statements and is not one of the unconsolidated structured entities shown here. The number and aggregated net asset value of investment funds show funds to which HVB Group has an exposure. Regarding the statement of the number of unconsolidated investment funds classified as structured entities, we have separately reported every special purpose entity to which HVB Group has an exposure, whereas special purpose entities that are managed by the same investment company were aggregated in the previous year. We have adjustment the previous-year figure accordingly.

	2020	2019
Number of unconsolidated investment funds classified as structured entities	697	732
of which managed by HVB Group	39	36
Aggregate net asset value (including minority interests) of the investment funds classified as		
structured entities (€ millions)	533,383	476,340
of which managed by HVB Group	2,177	1,940

With regard to the aggregate net asset value, it should be noted that our risk is only calculated in terms of the participating interest held, loans extended or derivatives issued as a proportion of the aggregate fund volume. A risk analysis is provided in the table under “Risks in connection with unconsolidated structured entities” below.

Other Information (Continued)

Other structured entities
This category covers structured entities that cannot be assigned to any of the other categories. For the most part, HVB Group mainly performs lending activities under this category with structured entities set up by customers or by HVB Group on behalf of customers.

These entities are mostly lease vehicles that have only insufficient equity and are controlled economically by the lessee. Some of the lease vehicles were financed through syndicated loans.

	2020	2019
Number of other structured entities	13	16
Aggregate total assets (€ millions)	1,189	3,101

Risks in connection with unconsolidated structured entities
The following tables show the carrying amounts of the assets and liabilities together with the off-balance-sheet risk positions of HVB Group in connection with unconsolidated structured entities:

(€ millions)

	2020				
	ABS VEHICLES (INVESTOR POSITIONS)	REPACKAGING VEHICLES	FUNDING VEHICLES FOR CUSTOMERS	SOME INVESTMENT FUNDS	OTHER STRUCTURED ENTITIES
Assets	**8,686**	**33**	**5,617**	**4,071**	**641**
Financial assets held for trading	403	33	—	2,322	—
Financial assets at FVTPL	28	—	—	27	2
Financial assets at FVTOCI	82	—	—	—	—
Loans and receivables with banks (at cost)	—	—	—	—	—
Loans and receivables with customers (at cost)	8,173	—	5,617	1,722	639
Hedging derivatives	—	—	—	—	—
Other assets	—	—	—	—	—
Liabilities	**2,152**	**—**	**62**	**12,119**	**61**
Deposits from banks	—	—	—	—	—
Deposits from customers	2,142	—	61	10,425	43
Debt securities in issue	—	—	—	1,439	—
Financial liabilities held for trading	10	—	—	254	2
Financial liabilities at FVTPL	—	—	—	—	—
Hedging derivatives	—	—	—	—	—
Other liabilities	—	—	—	1	—
Provisions	—	—	1	—	16
Off-balance-sheet positions	**51**	**—**	**2,645**	**209**	**7**
Irrevocable credit commitments and other commitments	51	—	2,645	209	—
Guarantees	—	—	—	—	7
Maximum exposure to loss	**8,737**	**33**	**8,262**	**4,280**	**648**

(€ millions)

	2019				
	ABS VEHICLES (INVESTOR POSITIONS)	REPACKAGING VEHICLES	FUNDING VEHICLES FOR CUSTOMERS	SOME INVESTMENT FUNDS	OTHER STRUCTURED ENTITIES
Assets	**9,116**	**—**	**6,048**	**4,594**	**1,170**
Financial assets held for trading	657	—	—	2,904	—
Financial assets at FVTPL	34	—	—	35	2
Financial assets at FVTOCI	—	—	—	—	—
Loans and receivables with banks (at cost)	—	—	—	—	—
Loans and receivables with customers (at cost)	8,425	—	6,048	1,655	1,168
Hedging derivatives	—	—	—	—	—
Other assets	—	—	—	—	—
Liabilities	**2,156**	**—**	**71**	**3,848**	**108**
Deposits from banks	—	—	—	—	—
Deposits from customers	2,142	—	69	2,610	93
Debt securities in issue	—	—	—	1,027	—
Financial liabilities held for trading	13	—	—	211	—
Financial liabilities at FVTPL	—	—	—	—	—
Hedging derivatives	—	—	—	—	—
Other liabilities	1	—	—	—	—
Provisions	—	—	2	—	15
Off-balance-sheet positions	**51**	**—**	**1,557**	**64**	**45**
Irrevocable credit commitments and other commitments	51	—	1,557	64	1
Guarantees	—	—	—	—	44
Maximum exposure to loss	**9,167**	**—**	**7,605**	**4,658**	**1,215**

The maximum exposure to loss from unconsolidated structured entities arises from the assets and off-balance-sheet risk positions relating to structured entities. This view does not, however, reflect the economic risk, as the collateral received and hedging instruments are not included.

No financial or other support ("implicit support") was provided to unconsolidated structured entities during the reporting period without having a contractual obligation to do so. Neither are there any concrete plans to provide support to unconsolidated structured entities in future.

Sponsored unconsolidated structured entities
Structured entities are classified as sponsored by HVB Group, if HVB Group was materially involved in setting up the entities. HVB Group has sponsored structured entities without having a participating interest in these entities through financial instruments. Thus, HVB Group is not exposed to the economic risks arising from these structured entities.

We only generate income from structured entities without participating interests to a limited extent through financial instruments. Fee and commission income of €13 million (previous year: €12 million) from charges and management fees was generated during the reporting period on investment funds managed by the Bank, of which €9 million (previous year: €9 million) was passed on to third parties in trailer fees.

Other Information (Continued)

Consolidated structured entities
The biggest consolidated structured entity is the multi-seller conduit programme Arabella. Securities with a nominal value of €5,014 million (previous year: €4,881 million) were outstanding at 31 December 2020. The total assets of the multi-seller conduit Arabella Finance DAC at the reporting date amounted to €5,032 million (previous year: €4,891 million).

Contractual arrangements that oblige HVB Group to provide financial assistance to consolidated structured entities exist notably in the form of liquidity facilities. These may be drawn by the vehicles to bridge maturity mismatches between the assets acquired and the securities issued.

Financial or other support was provided to consolidated structured entities without a contractual obligation to do so ("implicit support"):
– Where the market conditions prevented the securities issued by the consolidated multi-seller conduit Arabella Finance DAC from being placed, HVB has acquired such issues. Without the purchases of the securities, HVB would have been required to provide liquidity facilities in the same amount to individual Elektra Purchase companies. At the reporting date, HVB Group held securities issued by Arabella Finance DAC with a nominal value of €2,234 million (previous year: €2,395 million) in its portfolio.
– Future support arrangements are planned as follows: HVB Group will continue to decide on a case-by-case basis whether to buy temporarily non-placeable securities issued by the consolidated multi-seller conduit Arabella Finance DAC or utilise the liquidity lines. Accordingly, the volume of securities to be acquired depends on the funding required, the prevailing market conditions and the above decision in each case.
– Both contractual financial and other support provided to consolidated structured entities without a contractual obligation to do so are not material for the consolidated financial statements, as these represent intra-group transactions.

89 Trust business

(€ millions)

	2020	2019
Trust assets	**2,314**	**5,091**
Loans and receivables with banks	—	—
Loans and receivables with customers	267	4
Equity securities and other variable-yield securities	—	—
Debt securities and other fixed-income securities	—	—
Participating interests	—	—
Property, plant and equipment	—	—
Other assets	—	—
Fund shares held in trust	2,047	5,087
Remaining trust assets	—	—
Trust liabilities	**2,314**	**5,091**
Deposits from banks	267	4
Deposits from customers	2,047	5,087
Debt certificates including bonds	—	—
Other liabilities	—	—

The increase in trust assets is mainly attributable to the KfW Schnellkredit 2020 loan, which HVB granted to its customers as part of the government support measures due to the COVID-19 pandemic (€0.3 billion). In this context, KfW assumes all the risks (100% guarantee), stipulates the conditions and provides the funds. The KfW Schnellkredit is thus to be classified as a trust loan.

90 Transfer of financial assets

Transferred financial assets are derecognised in accordance with the derecognition criteria set forth in IFRS 9 when substantially all the risks and rewards incident to ownership of the asset are transferred.

HVB Group has no continuing involvement in transferred and derecognised financial assets for which substantially the risks and rewards are neither retained nor transferred.

Transferred, non-derecognised financial assets

However, HVB Group conducts business transactions under which it transfers previously recognised financial assets in accordance with IFRS 9, but substantially retains all the risks and rewards associated with these assets, meaning that such assets are not derecognised. The recognised asset is simultaneously offset by an associated liability for the consideration received, which corresponds to recognition as a secured loan. HVB Group may not use these transferred, non-derecognised assets for other purposes.

Transactions of this type conducted by the Group relate primarily to genuine securities repurchase agreements (repos) and securities lending transactions.

The securities (transferred) under repo transactions (cash sale) continue to be carried and measured in the consolidated balance sheet, as the Group as seller retains all the credit, share price, interest rate and currency risks associated with the assets and their results. The payment received by the buyer for whom the transferred security acts as collateral is recognised as a repo liability payable to banks or customers, depending on the counterparty. Upon delivery of the securities, the unrestricted power of disposal passes to the buyer.

Where the corporate group acts as a lender of securities in securities lending transactions, the securities lent to counterparties continue to be carried in the consolidated balance sheet of the lender.

The transactions are conducted under the customary market terms for securities lending and repurchasing agreements, under which the counterparty holds a contractual or customary right to sell on or pledge on the securities received.

At the same time, these transaction types also encompass such examples as the true sale securitisation transactions Rosenkavalier 2008, Rosenkavalier 2015, Rosenkavalier 2020 and Geldilux 2015 (see the Note “Own securitisation”) carried out by HVB Group, under which non-derecognised securitised customer receivables indirectly serve as collateral for repurchase agreements with the ECB.

The following Note “Assets assigned or pledged as collateral for own liabilities” contains details of repo transactions, securities lending transactions and other transactions under which the financial assets transferred as collateral for own liabilities are not derecognised.

Other Information (Continued)

91 Assets assigned or pledged as collateral for own liabilities

Examples of own liabilities of HVB Group for which we provide collateral are special credit facilities provided by KfW and similar institutions, which we have passed on as loans in compliance with their conditions. In addition, collateral has been provided for borrowings under repurchase agreements on international money markets, for open market transactions with central banks and for securities lending transactions. As a seller under repurchase agreements, HVB Group has entered into sales and repurchase transactions for securities with a carrying amount of 45.5 billion (previous year: €39.5 billion) or transferred them to a collateral pool with the European Central Bank or GC Pooling. It is not always necessary for liabilities to exist in the latter instance. These securities continue to be shown under our assets, and the consideration received in return is stated under liabilities.

The following table shows the breakdown of assets that we provide as collateral for own liabilities: (€ millions)

	2020	2019
Financial assets held for trading	8,164	8,623
Financial assets at FVTPL	6,638	7,423
Financial assets at FVTOCI	8,232	9,951
Loans and receivables with banks (at cost)	1,006	—
Loans and receivables with customers (at cost)	19,139	11,280
Property, plant and equipment	—	—
Non-recognised received securities pledged on:		
pledged securities from non-capitalised securities lending transactions	7,875	10,991
received collateral pledged	18,733	14,548
Total	**69,787**	**62,816**

The collateral pledged from "Loans and receivables with customers (at cost)" relates to special credit facilities provided by KfW and similar institutions.

The assets pledged as collateral by HVB Group relate to the following liabilities: (€ millions)

	2020	2019
Deposits from banks	46,657	46,141
Deposits from customers	9,453	2,936
Debt securities in issue	—	—
Financial liabilities held for trading	6,460	6,034
Financial liabilities at FVTPL	—	—
Contingent liabilities	—	—
Obligations to return non-expensed, borrowed securities	7,217	7,705
Total	**69,787**	**62,816**

Compliant with IFRS 7.14, we are disclosing the carrying amount of the financial assets that we provide as collateral. In addition, figures are disclosed showing the extent to which the collateral provided may be pledged or sold on by the collateral assignee.

(€ millions)

	2020	2019
Aggregate carrying amount of assets pledged as collateral	69,787	62,816
of which: may be pledged/sold on	34,811	35,957

92 Collateral received that HVB Group may pledge or sell on

Under genuine repurchase agreements (repos) and collateral agreements for OTC derivatives, HVB Group has received collateral that it may pledge or sell on at any time under customary market conditions without the collateral provider having to be in arrears. The fair value of the collateral received is €30.0 billion (previous year: €23.7 billion).

HVB Group has actually pledged or sold on €18.7 billion of this amount (previous year: €14.5 billion), for which there is an obligation to return the same type, volume and quality of the collateral received.

The transactions that make it possible to use this collateral were conducted under the customary market conditions for securities repurchase and lending transactions.

93 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 €487 million for these services in the reporting year (previous-year period: €543 million). This was offset by income of €18 million (previous-year period: €28 million) from services rendered and internal charges. Moreover, software products worth €1 million (previous-year period: €1 million) were purchased from UniCredit Services S. C. p. A.

Furthermore, HVB Group has transferred certain back office activities to UniCredit Services S. C. p. A. In this context, UniCredit Services S. C. p. A. provides settlement services for HVB and other affiliates in line with a standard business and operating model. HVB Group incurred expenses of €112 million for these services in the reporting year (previous-year period: €173 million).

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

Subsequent to the filing of the squeeze-out resolution in the Commercial Register on 15 September 2008, HVB is not listed any more. Consequently, the compensation paid to the members of the Management Board is not shown on an individualised basis.

Other Information (Continued)

Emoluments paid to members of the Management Board and Supervisory Board:

(€ thousands)

	2020						
	SHORT-TERM COMPONENTS		LONG-TERM INCENTIVES				
	FIXED SALARY	SHORT-TERM PERFORMANCE-RELATED CASH REMUNERATION	LONG-TERM PERFORMANCE-RELATED CASH REMUNERATION	SHARE-BASED REMUNERATION	POST-EMPLOYMENT BENEFITS	TERMINATION BENEFITS	TOTAL
Members of the Management Board of UniCredit Bank AG	4,321	565	254	267	1,179	—	6,586
Members of the Supervisory Board of UniCredit Bank AG for Supervisory Board activities	824	—	—	—	—	—	824
Members of the Supervisory Board of UniCredit Bank AG for activities as employee representatives	561	40	—	—	33	—	634
Former members of the Management Board of UniCredit Bank AG and their surviving dependants	248	58	114	1,814	15,955	—	18,189

(€ thousands)

	2019						
	SHORT-TERM COMPONENTS		LONG-TERM INCENTIVES				
	FIXED SALARY	SHORT-TERM PERFORMANCE-RELATED CASH REMUNERATION	LONG-TERM PERFORMANCE-RELATED CASH REMUNERATION	SHARE-BASED REMUNERATION	POST-EMPLOYMENT BENEFITS	TERMINATION BENEFITS	TOTAL
Members of the Management Board of UniCredit Bank AG	4,336	924	101	109	1,243	—	6,713
Members of the Supervisory Board of UniCredit Bank AG for Supervisory Board activities	800	—	—	—	—	—	800
Members of the Supervisory Board of UniCredit Bank AG for activities as employee representatives	459	35	—	—	30	—	524
Former members of the Management Board of UniCredit Bank AG and their surviving dependants	626	190	235	1,740	11,688	1,228	15,707

It is the task of the Bank's full Supervisory Board to decide on the total remuneration paid to the individual members of the Management Board and to review the structure of the remuneration systems for the Management Board. The full Supervisory Board receives assistance in this regard from the Remuneration Control Committee, which submits appropriate proposals to the full Supervisory Board. Appropriateness and sustainability are key criteria for the form and structure of the remuneration paid to the members of the Management Board. The structure of remuneration is derived from the service agreements with the members of the Management Board. It has two components: a fixed salary and a variable element. The variable remuneration is normally granted in deferred tranches over several years in the form of cash and in shares, with disbursement dependent upon defined corporate targets being achieved in the subsequent years.

Pension commitments for seven members of the Management Board are shown in the table alongside the direct emoluments. Six members of the Management Board took part in the employer-financed, fund-linked pension scheme for executives (known as AgfA) in 2020. The Bank will provide/has provided 35% of the fixed salary contributions (reporting period: €1,014 thousand, previous-year period: €980 thousand).

Non-monetary compensation and other fringe benefits are granted to members of the Management Board to the usual extent. The amounts involved are included in the totals for fixed remuneration shown.

Compensation paid to members of the Management Board for positions on supervisory boards of any UniCredit group companies is surrendered to HVB.

The provisions for pensions compliant with IFRS for former and retired members of the Management Board of HVB and their surviving dependants (including the pension commitments transferred to HVB Trust Pensionsfonds AG) amounted to €164,625 thousand (previous-year period: €148,034 thousand).

The compensation paid to retired members of the Management Board and their surviving dependants amounted to €9,286 thousand in the reporting period after the transfer of a large part of the pension commitments to HVB Trust Pensionsfonds AG (previous-year period: €8,834 thousand).

Share-based remuneration was granted to the members of the Management Board under the Group Incentive Scheme in the reporting period as follows:

SHARES GRANTED TO MEMBERS OF THE MANAGEMENT BOARD OF UNICREDIT BANK AG	2020	2019
Number of shares granted	16,168	7,948
Fair value on grant date (€)	6.802	11.838

For details of share-based compensation, please refer to the disclosures in the Note "Operating costs", where the underlying UniCredit programmes are described.

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

	2020			2019		
	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ASSUMED	LIABILITIES	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ASSUMED	LIABILITIES
Members of the Management Board of UniCredit Bank AG	2,846	791	2,894	2,312	593	4,148
Members of the Supervisory Board of UniCredit Bank AG	—	—	1,080	—	—	2,735
Members of the Executive Management Committee[1]	—	—	442	—	—	4,978

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 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 and one overdraft facility at 6% p.a. until further notice.

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

Other Information (Continued)

94 Fees paid to the independent auditors

The following table shows the breakdown of fees (excluding value-added tax) recorded as expense in the reporting period, as paid to the independent auditors Deloitte GmbH Wirtschaftsprüfungsgesellschaft, for activities performed for HVB Group:

(€ millions)

	2020	2019
Fee for	**11**	**11**
Auditing of the financial statements	9	9
Other auditing services	2	2
Tax consulting services	—	—
Other services	—	—

95 Employees

AVERAGE NUMBER OF PEOPLE EMPLOYED BY US	2020	2019
Employees (excluding trainees)	13,360	13,327
Full-time	9,380	9,346
Part-time	3,980	3,981
Trainees	273	283

(in %)

	WOMEN	MEN	2020	2019
LENGTH OF SERVICE OF EMPLOYEES	(EXCLUDING TRAINEES)		TOTAL	TOTAL
31 years or more	18.6	16.3	17.5	16.2
from 21 years to less than 31 years	37.4	25.8	31.9	30.5
from 11 years to less than 21 years	21.9	23.7	22.7	26.1
less than 11 years	22.1	34.2	27.9	27.2

96 Offices

	1/1/2020	ADDITIONS NEW OPENINGS	REDUCTIONS CLOSURES	 CONSOLIDATIONS	CHANGE IN CONSOLIDATED GROUP	31/12/2020
Germany						
Baden-Wuerttemberg	16	—	1	—	—	15
Bavaria	288	—	4	6	4	282
Berlin	6	—	—	—	—	6
Brandenburg	7	—	2	—	—	5
Bremen	1	—	—	—	—	1
Hamburg	16	—	—	—	—	16
Hesse	11	—	—	—	1	12
Lower Saxony	12	—	—	1	—	11
Mecklenburg-Western Pomerania	4	—	1	—	—	3
North Rhine-Westphalia	8	—	—	—	—	8
Rhineland-Palatinate	14	—	2	—	—	12
Saarland	4	—	1	—	—	3
Saxony	8	—	—	1	—	7
Saxony-Anhalt	9	—	—	—	—	9
Schleswig-Holstein	35	—	4	1	—	30
Thuringia	5	—	—	—	—	5
Subtotal	**444**	**—**	**15**	**9**	**5**	**425**
Other regions						
Africa	—	—	—	—	—	—
Americas	7	—	—	—	—	7
Asia	6	—	—	—	—	6
Europe	41	—	—	—	1	42
Subtotal	**54**	**—**	**—**	**—**	**1**	**55**
Total	**498**	**—**	**15**	**9**	**6**	**480**

Other Information (Continued)

97 List of holdings

The separate list of holdings drawn up in compliance with Section 313 (2) HGB, contains all the affiliates, joint ventures and associates broken down by whether they are included in the consolidated financial statements or not. The list also includes selected holdings pursuant to Section 271 (1) HGB and structured entities included in the consolidated financial statements, with and without an HVB shareholding.

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	SHARE OF CAPITAL IN % OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
1 Controlled companies						
1.1 Controlled by voting rights						
1.1.1 Consolidated subsidiaries						
1.1.1.1 Banks and financial institutions						
UniCredit Leasing Finance GmbH	Hamburg	100.0	100.0	EUR	160,013	[2]
1.1.1.2 Other consolidated subsidiaries						
Acis Immobilien- und Projektentwicklungs GmbH & Co. Oberbaum City KG[3]	Grünwald	100.0	100.0	EUR	142	260
Acis Immobilien- und Projektentwicklungs GmbH & Co. Parkkolonnaden KG[3]	Grünwald	100.0	100.0	EUR	32	125
Acis Immobilien- und Projektentwicklungs GmbH & Co. Stuttgart Kronprinzstraße KG[3]	Grünwald	100.0	100.0	EUR	39	(1,467)
Argentaurus Immobilien-Vermietungs- und Verwaltungs GmbH[3]	Munich	100.0	100.0	EUR	793	(1,616)
Atlanterra Immobilienverwaltungs GmbH	Munich	90.0	90.0	EUR	(34,462)	950
A&T-Projektentwicklungs GmbH & Co. Potsdamer Platz Berlin KG[3]	Munich	100.0	100.0	EUR	(37,243)	—
Bayerische Wohnungsgesellschaft für Handel und Industrie, Gesellschaft mit beschränkter Haftung	Munich	100.0	100.0	EUR	243	[2]
BIL Leasing-Fonds GmbH & Co VELUM KG (Stimmrechtsanteil 66.7%, davon mittelbar 33.3%)	Grünwald	100.0	—	EUR	412	282
BIL Leasing-Fonds Verwaltungs-GmbH	Grünwald	100.0	100.0	EUR	27	(1)
Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Alpha Management KG[3]	Munich	100.0	100.0	EUR	(22,880)	—
Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Gamma Management KG[3]	Munich	100.0	100.0	EUR	(59,493)	—
Food & more GmbH[3]	Munich	100.0	—	EUR	237	[1.1]
Grundstücksaktiengesellschaft am Potsdamer Platz (Haus Vaterland)	Munich	98.2	98.2	EUR	4,495	[2]
Grundstücksgesellschaft Simon beschränkt haftende Kommanditgesellschaft[3]	Munich	100.0	100.0	EUR	52	1,206
HAWA Grundstücks GmbH & Co. OHG Hotelverwaltung[3]	Munich	100.0	100.0	EUR	276	19,436
HAWA Grundstücks GmbH & Co OHG Immobilienverwaltung[3]	Munich	100.0	100.0	EUR	54	485
H.F.S. Immobilienfonds GmbH	Munich	100.0	100.0	EUR	26	[2]
H.F.S. Leasingfonds Deutschland 1 GmbH & Co. KG (Immobilienleasing)[3]	Munich	100.0	100.0	EUR	22,188	(292)
H.F.S. Leasingfonds Deutschland 7 GmbH & Co. KG[3]	Munich	99.4	99.4	EUR	(9,524)	(2,517)
H.F.S. Leasingfonds GmbH	Grünwald	100.0	100.0	EUR	26	30
HVB Capital LLC	Wilmington	100.0	—	USD	1,128	87
HVB Capital LLC II	Wilmington	100.0	—	GBP	3	—
HVB Capital LLC III	Wilmington	100.0	—	USD	1,107	90
HVB Funding Trust II	Wilmington	100.0	—	GBP	3	—
HVB Gesellschaft für Gebäude mbH & Co. KG[3]	Munich	100.0	—	EUR	871,401	432,082
HVB Hong Kong Limited	Hongkong	100.0	—	USD	3,136	(394)
HVB Immobilien AG[3]	Munich	100.0	—	EUR	86,644	[1.2]
HVB Projekt GmbH[3]	Munich	100.0	94.0	EUR	72,151	[2]
HVB Secur GmbH[3]	Munich	100.0	—	EUR	126	[1.3]
HVB Tecta GmbH[3]	Munich	100.0	94.0	EUR	1,751	[2]
HVB Verwa 4 GmbH[3]	Munich	100.0	—	EUR	10,358	[1.4]

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	SHARE OF CAPITAL IN % OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
HVB Verwa 4.4 GmbH[3]	Munich	100.0	100.0	EUR	10,025	[2]
HVZ GmbH & Co. Objekt KG[3]	Munich	100.0	100.0	EUR	148,091	4,856
Hypo-Bank Verwaltungszentrum GmbH & Co. KG Objekt Arabellastraße[3]	Munich	100.0	100.0	EUR	26	(1,647)
Interra Gesellschaft für Immobilienverwaltung mbH[3]	Munich	100.0	93.9	EUR	51	[2]
MERKURHOF Grundstücksgesellschaft mit beschränkter Haftung[3]	Munich	100.0	—	EUR	16,692	[1.5]
NF Objekt FFM GmbH[3]	Munich	100.0	100.0	EUR	125	[2]
NF Objekte Berlin GmbH[3]	Munich	100.0	100.0	EUR	15,725	[2]
Omnia Grundstücks-GmbH & Co. Objekt Haidenauplatz KG[3]	Munich	100.0	94.0	EUR	26	—
Omnia Grundstücks-GmbH & Co. Objekt Perlach KG[3]	Munich	100.0	100.0	EUR	4,720	764
Orestos Immobilien-Verwaltungs GmbH[3]	Munich	100.0	100.0	EUR	56,674	[2]
Othmarschen Park Hamburg GmbH & Co. Centerpark KG[3]	Munich	100.0	100.0	EUR	(18,942)	—
Othmarschen Park Hamburg GmbH & Co. Gewerbepark KG[3]	Munich	100.0	100.0	EUR	(44,083)	—
Portia Grundstücks-Verwaltungsgesellschaft mbH & Co. Objekt KG[3]	Munich	100.0	100.0	EUR	500,014	394,490
Rolin Grundstücksplanungs- und -verwaltungsgesellschaft mbH	Munich	100.0	100.0	EUR	64	16
Salvatorplatz-Grundstücksgesellschaft mbH & Co. oHG Saarland[3]	Munich	100.0	100.0	EUR	1,534	351
Salvatorplatz-Grundstücksgesellschaft mbH & Co. OHG Verwaltungszentrum[3]	Munich	100.0	100.0	EUR	2,301	70,382
Selfoss Beteiligungsgesellschaft mbH[3]	Grünwald	100.0	100.0	EUR	25	[2]
Simon Verwaltungs-Aktiengesellschaft i. L.	Munich	100.0	—	EUR	2,950	(26)
Sirius Immobilien- und Projektentwicklungs GmbH	Munich	100.0	100.0	EUR	(143,835)	[2]
Solos Immobilien- und Projektentwicklungs GmbH & Co. Sirius Beteiligungs KG[3]	Munich	100.0	100.0	EUR	(61,806)	925
Spree Galerie Hotelbetriebsgesellschaft mbH[3]	Munich	100.0	100.0	EUR	249	[2]
Structured Invest Société Anonyme	Luxembourg	100.0	—	EUR	8,071	514
T & P Frankfurt Development B.V.[4]	Amsterdam	100.0	100.0	EUR	(7,271)	3
T & P Vastgoed Stuttgart B.V.[4]	Amsterdam	87.5	87.5	EUR	(14,485)	11
TERRENO Grundstücksverwaltung GmbH & Co. Entwicklungs- und Finanzierungsvermittlungs-KG[3]	Munich	75.0	75.0	EUR	(268,579)	—
TIVOLI Grundstücks-Aktiengesellschaft	Munich	100.0	100.0	EUR	497,438	489,922
TRICASA Grundbesitz Gesellschaft mbH & Co. 1. Vermietungs KG[3]	Munich	100.0	100.0	EUR	13,634	1,352
TRICASA Grundbesitzgesellschaft des bürgerlichen Rechts Nr. 1	Munich	100.0	100.0	EUR	24,254	(1,735)
UniCredit Beteiligungs GmbH[3]	Munich	100.0	—	EUR	1,175	[1.6]
UniCredit Capital Markets LLC	New York	100.0	100.0	USD	164,749	19,685
UniCredit Direct Services GmbH[3]	Munich	100.0	—	EUR	993	[1.7]
UniCredit Leasing Aviation GmbH	Hamburg	100.0	100.0	EUR	30,258	1,949
UniCredit Leasing GmbH[7]	Hamburg	100.0	—	EUR	452,026	[1.8]
UniCredit U.S. Finance LLC	Wilmington	100.0	—	USD	115,541	(634)
Vermietungsgesellschaft mbH & Co. Objekt MOC KG[3]	Munich	89.3	89.3	EUR	(94,736)	1,656
Verwaltungsgesellschaft Katharinenhof mbH[3]	Munich	100.0	—	EUR	708	[1.9]
V.M.G. Vermietungsgesellschaft mbH	Munich	100.0	100.0	EUR	96	[2]
Wealth Management Capital Holding GmbH	Munich	100.0	—	EUR	20,656	[1.10]
WealthCap Entity Service GmbH	Munich	100.0	100.0	EUR	1,243	(2)
WealthCap Equity GmbH	Munich	100.0	100.0	EUR	337	—

Other Information (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
WealthCap Equity Management GmbH	Munich	100.0	100.0	EUR	690	555
WealthCap Fonds GmbH	Munich	100.0	100.0	EUR	1	(667)
WealthCap Immobilien 1 GmbH & Co. KG	Munich	100.0	100.0	EUR	287	596
WealthCap Immobilien 2 GmbH & Co. KG	Munich	100.0	100.0	EUR	1,757	462
Wealthcap Immobilien 43 Komplementär GmbH	Munich	100.0	100.0	EUR	26	1
Wealthcap Immobilienankauf Komplementär GmbH	Munich	100.0	100.0	EUR	27	2
WealthCap Immobilienfonds Deutschland 36						
Komplementär GmbH	Munich	100.0	100.0	EUR	(141)	35
WealthCap Immobilienfonds Deutschland 38						
Komplementär GmbH	Munich	100.0	100.0	EUR	106	2
WealthCap Initiatoren GmbH	Munich	100.0	100.0	EUR	1,152	(424)
WealthCap Investment Services GmbH	Munich	100.0	90.0	EUR	5,662	[2]
WealthCap Investments, Inc.	Wilmington	100.0	100.0	EUR	2,687	(23)
WealthCap Investorenbetreuung GmbH	Munich	100.0	100.0	EUR	2,511	[2]
WealthCap Kapitalverwaltungsgesellschaft mbH	Grünwald	100.0	100.0	EUR	13,000	[2]
WealthCap Leasing GmbH	Grünwald	100.0	100.0	EUR	(39)	41
WealthCap Management Services GmbH	Munich	100.0	100.0	EUR	(995)	(1,046)
Wealthcap Objekt Dresden GmbH & Co. KG	Munich	100.0	100.0	EUR	(2,219)	(1,400)
Wealthcap Objekt Essen II GmbH & Co. KG	Munich	100.0	100.0	EUR	1,243	(3)
Wealthcap Objekt Mainz GmbH & Co. KG	Munich	100.0	100.0	EUR	(491)	(500)
Wealthcap Objekt Stuttgart III GmbH & Co. KG	Munich	100.0	100.0	EUR	4,888	173
Wealthcap Objekt-Vorrat 25 GmbH & Co. KG	Munich	100.0	100.0	EUR	10	469
WealthCap PEIA Komplementär GmbH	Grünwald	100.0	100.0	EUR	39	(17)
WealthCap PEIA Management GmbH	Munich	100.0	94.0	EUR	2,093	839
WealthCap Real Estate Management GmbH	Munich	100.0	100.0	EUR	(4,511)	[2]
WealthCap Vorrats-2 GmbH	Munich	100.0	100.0	EUR	12	(2)
Weicker S. à r.l.	Luxembourg	100.0	—	EUR	21,870	2,942
1.1.2 Non-consolidated subsidiaries[5]						
Acis Immobilien- und Projektentwicklungs GmbH	Grünwald	100.0	100.0	EUR	25	[2]
AGRUND Grundstücks-GmbH	Munich	90.0	90.0			
Altea Verwaltungsgesellschaft mbH & Co. Objekt I KG	Munich	100.0	100.0			
AMMS Ersatz-Komplementär GmbH	Munich	100.0	100.0			
AMMS Komplementär GmbH i.L.	Ebersberg	98.8	98.8			
Antus Immobilien- und Projektentwicklungs GmbH	Munich	90.0	90.0	EUR	(14,972)	950
ANWA Gesellschaft für Anlagenverwaltung mbH	Munich	95.0	93.9			
Arena Stadion Beteiligungsverwaltungs-GmbH	Munich	100.0	—			
ARRONDA Immobilienverwaltungs GmbH	Munich	100.0	100.0	EUR	(38,676)	950
A&T-Projektentwicklungs-Verwaltungs GmbH	Munich	100.0	100.0			
Aufbau Dresden GmbH	Munich	100.0	100.0	EUR	(22,994)	—
Bertram Projekt Unodecima Technikzentrum GmbH & Co. KG	Munich	94.0	94.0	EUR	43	2,221
B.I. International Limited	George Town	100.0	100.0			
BIL Aircraftleasing GmbH	Grünwald	100.0	100.0			
BIL Immobilien Fonds GmbH	Munich	100.0	100.0			
Blue Capital Metro Amerika Inc.	Wilmington	100.0	100.0	USD	(113)	217
Delpha Immobilien- und Projektentwicklungs GmbH & Co.						
Großkugel Bauabschnitt Beta Management KG	Munich	100.0	100.0	EUR	(53,477)	—
Erste Onshore Windkraft Beteiligungsgesellschaft mbH & Co.						
Windpark Grefrath KG (share of voting rights: 68.3%)	Oldenburg	68.5	68.5	EUR	151	(358)
Erste Onshore Windkraft Beteiligungsgesellschaft mbH & Co.						
Windpark Krähenberg KG (share of voting rights: 68.3%)	Oldenburg	68.5	68.5			
Erste Onshore Windkraft Beteiligungsgesellschaft mbH & Co.						
Windpark Mose KG (share of voting rights: 68.3%)	Oldenburg	68.5	68.5			
Golf- und Country Club Seddiner See Immobilien GmbH	Munich	100.0	100.0	EUR	(15,507)	—
Großkugel Immobilien- und Projektentwicklungs GmbH	Munich	100.0	100.0	EUR	(3,354)	[2]

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
H.F.S. Immobilienfonds Deutschland 1 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 3 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 4 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 6 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 7 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 8 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 9 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 10 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 11 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 12 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 15 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 16 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 18 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 19 GmbH & Co. KG	Munich	100.0	100.0			
H.F.S. Immobilienfonds Europa 2 Beteiligungs GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Europa 3 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds GmbH & Co. Europa 4 KG	Munich	100.0	100.0			
H.F.S. Leasingfonds Deutschland 1 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Leasingfonds Deutschland 7 Komplementär GmbH	Munich	100.0	100.0			
H.F.S. Value Management GmbH	Munich	100.0	100.0			
H.F.S. Zweitmarktfonds Deutschland 1 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Zweitmarktfonds Deutschland 2 Komplementär GmbH	Grünwald	100.0	100.0			
Hofgarten Real Estate B.V. (share of voting rights: 50.5%)	Amsterdam	47.2	47.2	EUR	(49,339)	11
HVB Export Leasing GmbH	Munich	100.0	—			
HVB Gesellschaft für Gebäude Beteiligungs GmbH	Munich	100.0	—			
HVB London Investments (AVON) Limited	London	100.0	—			
HVBFF International Greece GmbH	Munich	100.0	100.0			
HVBFF Internationale Leasing GmbH	Munich	100.0	100.0	EUR	93	252
HVBFF Kapitalvermittlungs GmbH	Munich	100.0	100.0	EUR	19	[2]
HVBFF Leasing Objekt GmbH	Grünwald	100.0	100.0			
HVBFF Leasing-Fonds Verwaltungs GmbH	Munich	100.0	100.0			
HVBFF Objekt Beteiligungs GmbH	Munich	100.0	100.0			
Hypo-Bank Verwaltungszentrum GmbH	Munich	100.0	100.0			
HYPO-REAL Haus- und Grundbesitz Gesellschaft mbH	Munich	100.0	100.0	EUR	128	[2]
HYPO-REAL Haus- und Grundbesitz Gesellschaft mbH & Co. Immobilien-Vermietungs KG	Munich	80.0	80.0			
Landos Immobilien- und Projektentwicklungs GmbH	Munich	100.0	100.0			
Life Britannia GP Limited	Edgware	100.0	100.0			
Life Britannia Management GmbH	Grünwald	100.0	100.0	EUR	47	467
Life Management Erste GmbH	Munich	100.0	100.0	EUR	24	[2]
Life Management Zweite GmbH	Grünwald	100.0	100.0	EUR	26	[2]
Life Verwaltungs Erste GmbH	Munich	100.0	100.0			
Life Verwaltungs Zweite GmbH	Grünwald	100.0	100.0			
Motion Picture Production GmbH	Grünwald	51.2	51.2			
Omnia Grundstücks-GmbH	Munich	100.0	100.0	EUR	26	[2]
Omnia Grundstücks-GmbH & Co. Betriebs KG	Munich	100.0	94.0			
Othmarschen Park Hamburg Wohn- und Gewerbepark GmbH	Munich	100.0	100.0	EUR	102	[2]
"Portia" Grundstücksverwaltungs-Gesellschaft mit beschränkter Haftung	Munich	100.0	100.0			
Projekt-GbR Kronstadter Straße München	Munich	75.0	75.0	EUR	(5,690)	—
Quinterra Gesellschaft für Immobilienverwaltung mbH	Munich	100.0	100.0	EUR	26	[2]
Redstone Mortgages Limited	London	100.0	—	GBP	324	(258)
RHOTERRA Gesellschaft für Immobilienverwaltung mbH	Munich	100.0	93.9	EUR	26	[2]
Roncasa Immobilien-Verwaltungs GmbH	Munich	100.0	100.0	EUR	(34,270)	950

Other Information (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
Salvatorplatz-Grundstücksgesellschaft						
mit beschränkter Haftung	Munich	100.0	100.0	EUR	711	2
TERRENO Grundstücksverwaltung GmbH	Munich	75.0	75.0			
TERRENO Grundstücksverwaltung GmbH & Co.						
Objektgesellschaft Grillparzerstraße KG	Munich	75.0	—	EUR	(3,002)	(3)
Terronda Development B.V.	Amsterdam	100.0	100.0	EUR	(15,006)	(2)
Tishman Speyer Berlin Friedrichstraße KG i.L.						
(share of voting rights: 96.6%, of which 7.1% held indirectly)	Munich	97.1	5.9			
VCI Volta Center Immobilienverwaltungs GmbH	Munich	100.0	100.0	EUR	(19,197)	950
WealthCap Aircraft 27 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Canadian Management Inc.	Toronto	100.0	100.0			
WealthCap Dritte Europa Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Equity Sekundär GmbH	Munich	100.0	100.0			
WealthCap Erste Kanada Immobilien Verwaltung GmbH	Munich	100.0	100.0			
WealthCap Europa Erste Immobilien –						
Objekt Niederlande – Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Europa Immobilien Fünfte Objekte						
Österreich Komplementär GmbH	Munich	100.0	100.0			
WealthCap Europa Immobilien Siebte Objekte						
Österreich Komplementär GmbH	Munich	100.0	100.0			
WealthCap Europa Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
Wealthcap Fondsportfolio Immobilien International 1						
Komplementär GmbH	Grünwald	100.0	100.0			
Wealthcap Fondsportfolio Private Equity 23 GmbH & Co.						
geschlossene Investment KG	Grünwald	100.0	100.0			
Wealthcap Fondsportfolio Private Equity 24 GmbH & Co.						
geschlossene Investment KG	Grünwald	100.0	100.0			
WealthCap Immobilien Deutschland 39 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Immobilien Deutschland 45 GmbH & Co.						
geschlossene Investment KG	Munich	100.0	100.0			
Wealthcap Immobilien Deutschland 47 GmbH & Co.						
geschlossene Investment KG	Munich	100.0	100.0			
WealthCap Immobilien Nordamerika 16 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Immobilien Nordamerika 17 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Immobilien Services GmbH	Munich	100.0	100.0	EUR	50	2
WealthCap Immobilien und Verwaltung Sekundär GmbH	Munich	100.0	100.0			
WealthCap Immobilien 40 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Immobilien 41 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Immobilien 42 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Immobilien 44 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Immobilien 45 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Immobilien 47 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Immobilienfonds Deutschland 36 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Immobilienfonds Deutschland 37						
Komplementär GmbH	Munich	100.0	100.0			
WealthCap Los Gatos 121 Albright Way GP, Inc.	Wilmington	100.0	100.0			
WealthCap Management, Inc.	Wilmington	100.0	100.0			
WealthCap Mountain View GP, Inc.	Atlanta	100.0	100.0			
WealthCap Objekt-Vorrat 13 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 17 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 20 GmbH & Co. KG	Munich	100.0	100.0	EUR	353	8,532
WealthCap Objekt-Vorrat 20 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 21 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 25 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 33 GmbH & Co. KG	Munich	100.0	100.0			

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
Wealthcap Objekt-Vorrat 35 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 36 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 37 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 39 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 40 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 41 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 42 GmbH & Co. KG	Munich	100.0	100.0			
Wealthcap Objekt-Vorrat 43 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Portfolio 3 Komplementär GmbH	Grünwald	100.0	100.0			
Wealthcap Portfolio 4 Komplementär GmbH	Grünwald	100.0	100.0			
Wealthcap Portfolio 5 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity GmbH	Munich	100.0	100.0			
WealthCap Private Equity Sekundär GmbH	Munich	100.0	100.0			
WealthCap Private Equity 19 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity 20 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity 21 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity 22 Komplementär GmbH	Grünwald	100.0	100.0			
Wealthcap Private Equity 23 Komplementär GmbH	Grünwald	100.0	100.0			
Wealthcap Private Equity 24 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Real Estate GmbH	Munich	100.0	100.0			
WealthCap Real Estate Komplementär GmbH	Munich	100.0	100.0			
WealthCap Real Estate Sekundär GmbH	Munich	100.0	100.0			
WealthCap SachWerte Portfolio 2 Komplementär GmbH	Grünwald	100.0	100.0			
Wealthcap Spezial Büro 6 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Spezial Büro 7 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Spezial Portfolio Immobilien 1 Komplementär SARL	Luxembourg-Findel	100.0	100.0			
Wealthcap Spezial Portfolio Private Equity 1 Komplementär SARL	Luxembourg-Findel	100.0	100.0			
Wealthcap Spezial Wohnen 1 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Spezial 3 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Spezial 4 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Spezial 5 Komplementär GmbH	Munich	100.0	100.0			
Wealthcap Spezial-AIF Büro 9 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Spezial-AIF 1 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Stiftungstreuhand GmbH	Munich	100.0	100.0			
WealthCap USA Immobilien Verwaltungs GmbH	Munich	100.0	100.0	EUR	216	166
Wealthcap Wohnen 1b GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Zweite Europa Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Zweite USA Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap ZweitmarktWerte Immobilien 4 Komplementär GmbH	Munich	100.0	100.0			
WealthCap ZweitmarktWerte 5 GP S.à r.l.	Senningerberg	100.0	100.0			
WealthCap 23/24 Equity GmbH & Co. KG	Grünwald	100.0	100.0			
WealthCap 39 Komplementär GmbH	Munich	100.0	100.0			

Other Information (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN %	CURRENCY	SUBSCRIBED CAPITAL in thousands of currency units
1.2. Fully consolidated structured entities				
with or without shareholding				
Altus Alpha PLC	Dublin	0	EUR	40
Arabella Finance DAC	Dublin	0	EUR	< 1
BARD Engineering GmbH	Emden	0	EUR	100
BARD Holding GmbH	Emden	0	EUR	25
Buitengaats Holding B.V.	Eemshaven	0	EUR	18
Elektra Purchase No. 28 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 31 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 32 S.A. – Compartment 1	Luxembourg	0	EUR	31
Elektra Purchase No. 33 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 36 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 37 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 38 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 39 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 41 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 43 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 44 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 46 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 54 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 55 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 56 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 57 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 64 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 69 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 71 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 74 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 718 DAC	Dublin	0	EUR	< 1
Elektra Purchase No. 911 Ltd.	St. Helier	0	EUR	< 1
European-Office-Fonds	Munich	0	EUR	—
GELDILUX-TS-2015 S.A.	Luxembourg	0	EUR	31
GEMMA Verwaltungsgesellschaft mbH & Co.				
Vermietungs KG (held indirectly)[4, 6.1]	Pullach	6.1	EUR	68,272
H.F.S. Leasingfonds GmbH & Co. Deutschland 8 KG				
(held indirectly)[6.2]	Ebersberg	0.1	EUR	—
H.F.S. Leasingfonds GmbH & Co. Deutschland 9 KG				
(held indirectly)[6.3]	Ebersberg	0.1	EUR	—
H.F.S. Leasingfonds GmbH & Co. Deutschland 10 KG				
(held indirectly)[6.4]	Ebersberg	0.1	EUR	—
H.F.S. Leasingfonds GmbH & Co. Deutschland 11 KG				
(held indirectly)[6.5]	Ebersberg	0.1	EUR	—
H.F.S. Leasingfonds GmbH & Co. Deutschland 12 KG				
(held indirectly)[6.6]	Ebersberg	0.1	EUR	—
HVB Funding Trust	Wilmington	0	USD	—
HVB Funding Trust III	Wilmington	0	USD	—
Ice Creek Pool No. 1 DAC	Dublin	0	EUR	< 1
Ice Creek Pool No. 2 DAC	Dublin	0	EUR	< 1
MOC Verwaltungs GmbH & Co. Immobilien KG				
(held indirectly)[4, 6.7]	Munich	23	EUR	5,113
Rosenkavalier 2008 GmbH	Frankfurt am Main	0	EUR	25
Rosenkavalier 2015 UG	Frankfurt am Main	0	EUR	8
Rosenkavalier 2020 UG	Frankfurt am Main	0	EUR	3
Wealthcap Spezial-AIF-SV Büro 8	Grünwald	0	EUR	—

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
2 Joint ventures						
Minor joint ventures[5]						
Heizkraftwerke-Pool Verwaltungs-GmbH	Munich	33.3				
WealthCap Portfolio Finanzierungs-GmbH & Co. KG						
(share of voting rights: 50.0%)	Grünwald	—	—	EUR	71,922	2,236
3 Associates						
3.1. Associates valued at equity						
Comtrade Group B.V.[4]	Rotterdam	21.1		EUR	60,871	7,860
3.2. Minor associates[5]						
MOC Verwaltungs GmbH	Munich	23.0	23.0			
paydirekt Beteiligungsgesellschaft						
privater Banken mbH	Berlin	24.0				
4 Further holdings according to						
Section 271 (1) HGB[5]						
4.1. Banks and financial institutions						
AKA Ausfuhrkredit-Gesellschaft mbH	Frankfurt am Main	15.4		EUR	253,193	10,621
BBB Bürgschaftsbank zu Berlin-Brandenburg GmbH	Berlin	4.3		EUR	12,055	163
BGG Bayerische Garantiegesellschaft mbH						
für mittelständische Beteiligungen	Munich	10.5		EUR	55,374	2,023
Bürgschaftsbank Brandenburg GmbH	Potsdam	7.8		EUR	31,024	1,188
Bürgschaftsbank Mecklenburg-Vorpommern GmbH	Schwerin	9.1		EUR	16,899	262
Bürgschaftsbank Nordrhein-Westfalen GmbH -						
Kreditgarantiegemeinschaft -	Düsseldorf	0.6		EUR	38,223	1,463
Bürgschaftsbank Rheinland-Pfalz GmbH	Mainz	1.4		EUR	17,184	358
Bürgschaftsbank Saarland Gesellschaft						
mit beschränkter Haftung,						
Kreditgarantiegemeinschaft für den Handel,						
Handwerk und Gewerbe	Saarbrücken	1.3		EUR	4,388	54
Bürgschaftsbank Sachsen-Anhalt GmbH	Magdeburg	8.9		EUR	16,436	437
Bürgschaftsbank Sachsen GmbH (share voting rights: 5.4%)	Dresden	4.7		EUR	44,085	489
Bürgschaftsbank Schleswig-Holstein GmbH	Kiel	5.4		EUR	41,825	651
Bürgschaftsbank Thüringen GmbH	Erfurt	8.7		EUR	27,219	637
Bürgschaftsgemeinschaft Hamburg GmbH	Hamburg	10.5		EUR	26,783	505
MCB Bank Limited	Lahore	>0		PKR	168,914,783	38,598,014
Niedersächsische Bürgschaftsbank GmbH	Hannover	3.0		EUR	30,102	1,818
Saarländische Investitionskreditbank AG	Saarbrücken	3.3		EUR	65,636	351
4.2. Other companies						
ABE Clearing S.A.S.	Paris	2.0		EUR	31,181	3,267
Acton GmbH & Co. Heureka II KG	Munich	8.9		EUR	80,461	1,172
Amstar Liquidating Trust (share voting rights: 0.0%)	New York	>0	>0			
Babcock & Brown Limited	Sydney	3.2				
BayBG Bayerische Beteiligungsgesellschaft[8]	Munich	22.5		EUR	242,372	5,160
Bayerischer BankenFonds GbR[8]	Munich	25.6				
BIL Leasing-Fonds GmbH & Co. Altstadtsanierung Freiberg KG						
(share voting rights: 0.3%)	Grünwald	—	—	EUR	1,057	935
Bil Leasing-Fonds GmbH & Co Objekt Verwaltungssitz						
Bankenverband KG (share voting rights: 0.2%)	Grünwald	—	—			
BIL Leasing GmbH & Co Objekt Verwaltungsgebäude Halle KG						
(share voting rights: 0.1%)	Grünwald	—	—			

Other Information (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
BioM Aktiengesellschaft Munich Bio Tech Development	Planegg	8.5		EUR	3,094	(415)
Blue Capital Equity I GmbH & Co. KG i.L.	Munich	>0	>0			
Blue Capital Equity II GmbH & Co. KG i.L.	Munich	>0	>0	EUR	1,664	13
Blue Capital Equity III GmbH & Co. KG (share voting rights: >0.0%)	Munich	0.8	0.8	EUR	4,507	(590)
Blue Capital Equity IV GmbH & Co. KG	Munich	>0	>0	EUR	10,567	(923)
Blue Capital Equity IX GmbH & Co. KG (share voting rights: 0.6%)	Munich	0.7	0.7	EUR	3,166	162
Blue Capital Equity V GmbH & Co. KG (share voting rights: >0.0%)	Munich	0.1	0.1			
Blue Capital Equity VI GmbH & Co. KG	Munich	>0	>0	EUR	11,412	4,144
Blue Capital Equity VII GmbH & Co. KG	Munich	>0	>0	EUR	5,416	1,762
Blue Capital Equity VIII GmbH & Co. KG (share voting rights: 0.0%)	Munich	0.7	0.7	EUR	7,119	118
Blue Capital Europa Immobilien GmbH & Co. Fünfte Objekte Österreich KG	Munich	0.1	0.1	EUR	5,162	10,881
Blue Capital Europa Immobilien GmbH & Co. Siebte Objekte Österreich KG	Munich	0.1	0.1	EUR	6,613	26,935
Blue Capital Metro Amerika Fund, L.P.	Wilmington	0.1	0.1	EUR	111,955	(36,681)
Blue Capital Metropolitan Amerika GmbH & Co. KG	Munich	>0	>0	EUR	100,541	13,174
Boston Capital Partners V, L.L.C.	Wilmington	10.0	10.0			
Boston Capital Ventures V, L.P. (share voting rights: 0.0%)	Wilmington	20.0		USD	2,021	(1,004)
BTG Beteiligungsgesellschaft Hamburg mbH	Hamburg	13.6		EUR	5,141	495
BV Capital GmbH & Co. Beteiligungs KG Nr. 1	Hamburg	16.8	16.8	EUR	2,094	237
Carlyle Partners V, L.P. (share voting rights: 0.0%)	Wilmington	>0	>0	EUR	2,615,490	365,328
Carlyle U.S. Equity Opportunity Fund, L.P. (share voting rights: 0.0%)	Wilmington	0.9	0.9	EUR	845,151	143,045
Charme II (share voting rights: 0.0%)	Milan	7.7		EUR	1,645	151
China International Packaging Leasing Co., Ltd.	Peking	17.5		CNY	(101,056)	553
China Investment Incorporations (BVI) Ltd.	Tortola	10.8	10.8	HKD	79,631	26,623
CLS Group Holdings AG	Lucerne	1.2		GBP	338,053	(28,280)
CMC-Hertz Partners, L.P.	Wilmington	7.1				
CME Group Inc.	Wilmington	>0		USD	26,128,900	2,116,500
EDD AG (share voting rights: 3.1%)	Düsseldorf	3.0		EUR	21,601	(891)
Einkaufsgalerie Roter Turm Beteiligungs GmbH & Co. KG	Munich	10.8	10.8	EUR	5,720	291
Einkaufsgalerie Roter Turm Chemnitz GmbH & Co. KG	Munich	10.8	10.8	EUR	47,520	2,629
EPI Interim Company SE	Brussels	4.8				
EURO Kartensysteme GmbH	Frankfurt	6.0		EUR	12,187	151
Film & Entertainment VIP Medienfonds 4 GmbH & Co. KG	Grünwald	10.8	10.8	EUR	21,098	(1,290)
H.F.S. Immobilienfonds Bahnhofspassagen Potsdam GmbH & Co. KG	Munich	6.0	6.0	EUR	21,279	2,688
H.F.S. Immobilienfonds "Das Schloss" Berlin-Steglitz GmbH & Co. KG	Munich	6.0	6.0	EUR	132,536	119,759
H.F.S. Immobilienfonds Deutschland 4 GmbH & Co. KG	Munich	0.2	0.2	EUR	(894)	(276)
H.F.S. Immobilienfonds Deutschland 8 GmbH & Co. KG	Munich	0.1	0.1	EUR	13,427	2,417
H.F.S. Immobilienfonds Deutschland 9 GmbH & Co. KG	Munich	0.1	0.1	EUR	2,250	(327)
H.F.S. Immobilienfonds Deutschland 10 GmbH & Co. KG	Munich	1.4	1.4	EUR	88,822	257,288
H.F.S. Immobilienfonds Deutschland 12 GmbH & Co. KG	Munich	3.9	3.9	EUR	80,875	2,776
H.F.S. Immobilienfonds Deutschland 15 GmbH & Co. KG	Munich	0.1	0.1	EUR	14,195	1,648
H.F.S. Immobilienfonds Deutschland 16 GmbH & Co. KG	Munich	0.1	0.1	EUR	18,905	37,332
H.F.S. Immobilienfonds GmbH & Co. Europa 3 KG	Munich	0.1	0.1	EUR	3,138	254
H.F.S. Immobilienfonds Köln GmbH & Co. KG	Munich	>0	>0	EUR	1,743	(5)
H.F.S. Immobilienfonds Köln Supplier-Park GmbH & Co. KG	Munich	>0	>0	EUR	3,005	35,515
H.F.S. Immobilienfonds Schweinfurt GmbH & Co. KG	Munich	>0	>0			
H.F.S. Zweitmarktfonds Deutschland 1 GmbH & Co. KG	Ebersberg	0.1	0.1	EUR	17,440	4,557
H.F.S. Zweitmarktfonds Deutschland 2 GmbH & Co. KG	Ebersberg	>0	>0	EUR	79,713	15,143
HVBFF Life Britannia GmbH & Co Erste KG	Grünwald	>0	>0	EUR	1,976	(208)

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HVB Trust Pensionsfonds AG (share voting rights: 0.0%)[9]	Munich	100.0	—	EUR	4,288	13
IGEPA Gewerbepark GmbH & Co Vermietungs KG	Fürstenfeldbruck	2.0	2.0	EUR	(6,962)	11,408
Industriepalast in Leipzig Verwaltungs-GmbH & Co. KG i.L.						
(share voting rights: 6.3%)	Berlin	6.2				
Innovation Group Holdings Limited	Fareham	13.1	13.1	GBP	(61,365)	(71,398)
Interbanking Systems S.A. (Dias S.A.)	Maroussi	0.9		EUR	26,734	—
IPE Tank and Rail Investment 1 S.C.A.	Luxembourg	7.8		EUR	1,187	(220)
JBG/BC Investor, L.P.	Chevy Chase	0.5	0.5	EUR	70,944	15,598
Kepler Cheuvreux S.A. (share voting rights: 8.3%)	Paris	10.0		EUR	88,000	12,577
Kreditgarantiegemeinschaft der freien Berufe						
Baden-Württemberg Verwaltungs-GmbH	Stuttgart	1.3				
Kreditgarantiegemeinschaft der Industrie,						
des Verkehrsgewerbes und des Gastgewerbes						
Baden-Württemberg Verwaltungs-GmbH	Stuttgart	2.6				
Kreditgarantiegemeinschaft des						
bayerischen Gartenbaues GmbH	Munich	8.1				
Kreditgarantiegemeinschaft des						
bayerischen Handwerks GmbH	Munich	7.2		EUR	4,846	—
Kreditgarantiegemeinschaft des						
Handels Baden-Württemberg Verwaltungs-GmbH	Stuttgart	2.3				
Kreditgarantiegemeinschaft des						
Handwerks Baden-Württemberg Verwaltungsgesellschaft mbH	Stuttgart	2.5				
Kreditgarantiegemeinschaft des						
Hotel- und Gaststättengewerbes in Bayern GmbH	Munich	9.7		EUR	4,359	—
Kreditgarantiegemeinschaft für den Handel in Bayern GmbH	Munich	2.2		EUR	6,317	—
Kreditgarantiegemeinschaft in						
Baden-Württemberg Verwaltungs-GmbH	Stuttgart	5.1				
Life Britannia First LP (share voting rights: 1.0%)	Uxbridge	—	—	EUR	3,679	716
Life Britannia Second LP (share voting rights: 1.0%)	Uxbridge	—	—	EUR	7,038	984
Life GmbH & Co Erste KG	Munich	>0	>0	EUR	95,594	23,043
Life GmbH & Co. Zweite KG	Grünwald	>0	>0	EUR	53,514	(4,916)
Lion Capital Fund I, L.P.	London	0.9				
LME Holdings Limited	London	>0		USD	57,671	88,005
Martin Schmälzle Grundstücksgesellschaft						
Objekt Wolfsburg GmbH & Co. KG	Munich	>0	>0	EUR	15,711	—
MBG Mittelständische Beteiligungsgesellschaft						
Baden-Württemberg GmbH	Stuttgart	5.0		EUR	81,296	4,303
MBG Mittelständische Beteiligungsgesellschaft						
Rheinland-Pfalz mbH (share voting rights: 11.1%)	Mainz	9.8		EUR	15,991	664
MBG Mittelständische Beteiligungsgesellschaft						
Schleswig-Holstein mbH (share voting rights: 3.7%)	Kiel	3.6		EUR	43,486	2,193
Mittelständische Beteiligungsgesellschaft						
Berlin-Brandenburg GmbH	Potsdam	11.6		EUR	22,891	1,056
Mittelständische Beteiligungsgesellschaft						
Mecklenburg-Vorpommern mbH	Schwerin	15.4		EUR	16,618	668
Mittelständische Beteiligungsgesellschaft						
Niedersachsen (MBG) mbH	Hannover	8.2		EUR	14,731	422
Mittelständische Beteiligungsgesellschaft						
Sachsen-Anhalt mit beschränkter Haftung	Magdeburg	12.7		EUR	24,249	217
Mittelständische Beteiligungsgesellschaft Sachsen mbH	Dresden	11.8		EUR	49,169	1,567
Mittelständische Beteiligungsgesellschaft Thüringen mbH	Erfurt	13.4		EUR	26,842	928
Motion Picture Production GmbH & Co. Erste KG						
(share voting rights: 0.1%)	Grünwald	>0		EUR	(27,904)	1,460
Mühoga Münchner Hochgaragen Gesellschaft						
mit beschränkter Haftung[8]	Munich	25.0	25.0	EUR	4,314	1,922

Other Information (Continued)

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PICIC Insurance Ltd.	Karachi	>0				
PRINCIPIA FUND (share voting rights: 0.0%)	Mailand	10.0				
ProAreal GmbH i. I.	Wiesbaden	10.0				
Pro Health AG	Munich	4.0		EUR	735	(2,257)
REF IV Associates (Caymans) L.P. Acqua CIV S.C.S. (share voting rights: 0.0%)	Luxembourg	38.3				
Rocket Internet Capital Partners (Euro) SCS (share voting rights: 0.0%)	Luxembourg	4.4		EUR	397,355	46,000
Saarländische Kapitalbeteiligungsgesellschaft mit beschränkter Haftung (share voting rights: 8.8%)	Saarbrücken	8.7		EUR	7,823	230
Social Venture Fund GmbH & Co. KG (share voting rights: 0.0%)	Munich	9.6		EUR	2,023	(57)
Social Venture Fund II GmbH & Co. KG (share voting rights: 0.0%)	Munich	4.5		EUR	12,624	(1,591)
Special Product Company Holding Corp.	Wilmington	4.9	4.9	USD	(4,444)	973
Stahl Group S.A.	Luxembourg	0.4	0.4	EUR	291,540	53,878
SwanCap FLP II SCSp (share voting rights: 37.5%)[10]	Senningerberg	—		EUR	397	3,253
SwanCap FLP SCS (share voting rights: 37.5%)[10]	Senningerberg	—		EUR	475	1,936
SwanCap TB II SCSp (share voting rights: 0.0%)[11]	Senningerberg	>0				
S.W.I.F.T. SC	La Hulpe	0.3		EUR	442,950	39,830
True Sale International GmbH	Frankfurt	7.7		EUR	4,864	248
UniCredit Services Società Consortile per Azioni	Milan	>0		EUR	298,410	5,472
VISA Inc. (share voting rights: 0.0%)	Wilmington	>0		USD	36,210,000	10,866,000
WealthCap Aircraft 1 GmbH & Co. KG	Munich	>0	>0	EUR	16,729	(5,612)
WealthCap Aircraft 25 GmbH & Co. KG	Grünwald	>0	>0	EUR	32,295	342
WealthCap Aircraft 26 GmbH & Co. KG	Grünwald	>0	>0	USD	43,850	(150)
Wealthcap Büro Spezial-AIF 6 GmbH & Co. geschlossene Investment KG	Munich	>0	>0			
Wealthcap Fondsportfolio Immobilien International 1 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0			
WealthCap Fondsportfolio Private Equity 21 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	6,174	(3,103)
WealthCap Fondsportfolio Private Equity 22 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	859	(470)
WealthCap Immobilien Deutschland 38 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	117,848	20,714
WealthCap Immobilien Deutschland 39 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	155,271	21,638
WealthCap Immobilien Deutschland 40 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	80,933	7,386
WealthCap Immobilien Deutschland 41 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	40,073	5,752
Wealthcap Immobilien Deutschland 42 GmbH & Co. geschlossene Investment KG	Munich	>0	>0			
Wealthcap Immobilien Deutschland 44 GmbH & Co. geschlossene Investment KG	Munich	>0	>0			
WealthCap Immobilienfonds Deutschland 30 GmbH & Co. KG	Munich	>0	>0	EUR	46,680	4,773
WealthCap Immobilienfonds Deutschland 31 GmbH & Co. KG (share voting rights: 0.1%)	Munich	>0	>0	EUR	36,942	1,785
WealthCap Immobilienfonds Deutschland 32 GmbH & Co. KG (share voting rights: 0.1%)	Munich	>0	>0	EUR	51,219	3,024
WealthCap Immobilienfonds Deutschland 33 GmbH & Co. KG	Munich	>0	>0	EUR	58,597	2,614
WealthCap Immobilienfonds Deutschland 34 GmbH & Co. KG (share voting rights: 0.1%)	Munich	>0	>0	EUR	40,809	2,619
WealthCap Immobilienfonds Deutschland 35 GmbH & Co. KG	Munich	>0	>0	EUR	125,892	5,456

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WealthCap Immobilienfonds Deutschland 37 GmbH & Co. KG	Munich	>0	>0	EUR	62,921	2,429
WealthCap Immobilienfonds Donauwörth 1 GmbH & Co. KG	Munich	>0	>0	EUR	18,592	1,636
WealthCap Immobilienfonds Donauwörth 2 GmbH & Co. KG	Munich	>0	>0	EUR	4,664	591
WealthCap Immobilien Nordamerika 16 GmbH & Co.						
geschlossene Investment KG	Munich	>0	>0	USD	49,886	6,950
WealthCap Immobilien Nordamerika 17 GmbH & Co.						
geschlossene Investment KG	Munich	>0	>0	EUR	49,715	(3,348)
WealthCap Infrastructure Fund I GmbH & Co. KG	Munich	>0	>0	EUR	1,879	(218)
WealthCap Infrastruktur Amerika GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0	>0	USD	1,361	(227)
WealthCap Leasing 1 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	30,005	1,641
WealthCap Leasing 2 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	29,298	1,437
WealthCap Leasing 3 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	28,687	1,516
WealthCap Leasing 4 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	27,482	1,312
WealthCap LebensWert 1 GmbH & Co. KG						
(share voting rights: 0.3%)	Grünwald	>0	>0	EUR	(1,139)	545
WealthCap LebensWert 2. GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0	>0	USD	3,520	1,820
WealthCap Life Britannia 2. GmbH & Co KG	Munich	>0	>0			
WealthCap Life USA 4. GmbH & Co. KG	Grünwald	>0	>0	USD	60,903	1,924
WealthCap Los Gatos 121 Albright Way L.P.	Wilmington	>0	>0	USD	62,809	5,362
WealthCap Mountain View I L.P. (share voting rights: 0.1%)	Atlanta	—	—	EUR	48,845	7,347
WealthCap Objekt Berg-am-Laim GmbH & Co. KG	Munich	5.2	5.2	EUR	121,259	6,018
Wealthcap Objekt Berg-am-Laim II GmbH & Co. KG	Munich	10.1	10.1	EUR	84,576	910
Wealthcap Objekt Berlin I GmbH & Co. KG	Munich	10.1	10.1			
WealthCap Objekt Berlin II GmbH & Co. KG	Munich	10.1	10.1	EUR	(540)	(774)
WealthCap Objekt Bogenhausen GmbH & Co. KG	Munich	>0	>0	EUR	132,593	2,566
Wealthcap Objekte Grasbrunn und Ismaning GmbH & Co. KG	Munich	10.1	10.1	EUR	(916)	1,837
WealthCap Objekt Essen GmbH & Co. KG	Munich	5.2	5.2	EUR	26,624	1,548
WealthCap Objekte Südwest GmbH & Co. KG	Munich	5.1	5.1	EUR	64,877	2,832
WealthCap Objekt Frankfurt GmbH & Co. KG	Munich	5.2	5.2	EUR	46,984	1,036
Wealthcap Objekt Freiburg GmbH & Co. KG	Munich	10.1	10.1			
Wealthcap Objekt Fürstenfeldbruck GmbH & Co. KG	Munich	10.1	10.1			
WealthCap Objekt Hackerbrücke GmbH & Co. KG	Munich	5.2	5.2	EUR	33,358	1,683
WealthCap Objekt Hamburg GmbH & Co. KG	Munich	10.1	10.1	EUR	21,172	97
WealthCap Objekt Hannover Ia GmbH & Co. KG	Munich	5.2	5.2	EUR	14,880	1,451
WealthCap Objekt Hannover Ib GmbH & Co. KG	Munich	5.2	5.2	EUR	3,663	248
WealthCap Objekt Hannover II GmbH & Co. KG	Munich	5.2	5.2	EUR	17,022	451
WealthCap Objekt Hufelandstraße GmbH & Co. KG	Munich	5.2	5.2	EUR	11,748	582
Wealthcap Objekt Ludwigsburg GmbH & Co. KG	Munich	10.1	10.1			
Wealthcap Objekt Nürnberg GmbH & Co. KG	Munich	10.1	10.1			
Wealthcap Objekt Ottobrunn GmbH & Co. KG	Munich	10.1	10.1			
WealthCap Objekt Riem GmbH & Co. KG	Munich	5.2	5.2	EUR	30,298	1,519
WealthCap Objekt Riem II GmbH & Co. KG	Munich	5.2	5.2	EUR	41,309	2,304
WealthCap Objekt Schwabing GmbH & Co. KG	Munich	5.2	5.2	EUR	29,251	1,718
WealthCap Objekt Sendling GmbH & Co. KG	Munich	5.2	5.2	EUR	59,044	2,405
WealthCap Objekt Stuttgart Ia GmbH & Co. KG	Munich	>0	>0	EUR	17,466	1,165
WealthCap Objekt Stuttgart Ib GmbH & Co. KG	Munich	>0	>0	EUR	19,733	1,194
WealthCap Objekt Stuttgart II GmbH & Co. KG	Munich	5.2	5.2	EUR	24,939	962
WealthCap Objekt Theresienhöhe GmbH & Co. KG	Munich	5.2	5.2	EUR	64,248	2,714
Wealthcap Objekt Tübingen GmbH & Co. KG	Munich	0.1	0.1			
WealthCap Photovoltaik 1 GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0	>0	EUR	28,633	2,984
WealthCap Portfolio 3 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	31,114	7,270
Wealthcap Portfolio 4/5 GmbH & Co. KG	Grünwald	0.1	0.1			

Other Information (Continued)

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Wealthcap Portfolio 4 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0			
Wealthcap Portfolio 5 GmbH & Co. geschlossene Investment KG	Grünwald	0.2	0.2			
WealthCap Private Equity 10 GmbH & Co. KG	Munich	>0	>0	EUR	4,451	353
WealthCap Private Equity 11 GmbH & Co. KG	Munich	>0	>0	EUR	1,643	325
WealthCap Private Equity 12 GmbH & Co. KG	Grünwald	>0	>0	EUR	56,802	2,854
WealthCap Private Equity 13 GmbH & Co. KG	Grünwald	>0	>0	EUR	45,549	1,785
WealthCap Private Equity 14 GmbH & Co. KG	Grünwald	>0	>0	EUR	26,438	1,198
WealthCap Private Equity 15 GmbH & Co. KG (share voting rights: 0.1%)	Grünwald	>0	>0	EUR	10,844	1,161
WealthCap Private Equity 16 GmbH & Co. KG (share voting rights: 0.3%)	Grünwald	>0	>0	EUR	2,353	273
WealthCap Private Equity 17 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	13,316	795
WealthCap Private Equity 18 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	9,513	580
WealthCap Private Equity 19 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	31,856	(310)
WealthCap Private Equity 20 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	9,155	(98)
WealthCap SachWerte Portfolio 1 GmbH & Co. KG	Grünwald	>0	>0	EUR	22,001	1,370
WealthCap SachWerte Portfolio 2 GmbH & Co. geschlossene Investment KG	Grünwald	>0	>0	EUR	92,608	3,933
WealthCap Spezial-AIF 1 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	169,805	23,317
WealthCap Spezial-AIF 2 GmbH & Co. geschlossene Investment KG	Munich	5.2	5.2	EUR	79,250	5,739
WealthCap Spezial-AIF 3 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	257,916	29,752
WealthCap Spezial-AIF 4 GmbH & Co. geschlossene Investment KG	Munich	>0	>0	EUR	151,895	(76)
WealthCap Spezial-AIF 5 GmbH & Co. geschlossene Investment KG	Munich	10.1	10.1	EUR	165,733	1,382
Wealthcap Spezial-AIF Büro 7 GmbH & Co. geschlossene Investment KG	Munich	0.1	0.1			
Wealthcap Spezial Portfolio Immobilien 1 SCS SICAV-SIF	Luxembourg-Findel	>0	>0			
Wealthcap Spezial Portfolio Private Equity 1 SCS SICAV-SIF	Luxembourg-Findel	>0	>0	EUR	4,330	(170)
WealthCap US Life Dritte GmbH & Co. KG (share voting rights: >0%)	Grünwald	0.1	0.1	USD	3,940	(6,861)
Wealthcap Wohnen 1a GmbH & Co. KG	Munich	10.1	10.1	EUR	(405)	(409)
Wealthcap Wohnen 1 GmbH & Co. KG	Munich	10.1	10.1	EUR	(906)	64,034
Wealthcap Wohnen Spezial-AIF 1 GmbH & Co. geschlossene Investment KG	Munich	0.1	0.1			
WealthCap Zweitmarkt 3 BASIS GmbH & Co. KG	Grünwald	>0	>0	EUR	30,813	(130)
WealthCap Zweitmarkt 3 PLUS GmbH & Co. KG	Grünwald	>0	>0	EUR	14,550	5,241
WealthCap ZweitmarktWerte Immobilien 4 GmbH & Co. KG	Munich	>0	>0	EUR	8,458	(39)
Wohnungsbaugesellschaft der Stadt Röthenbach a. d. Pegnitz mit beschränkter Haftung	Röthenbach	5.2		EUR	3,893	196

Exchange rates for 1 euro at the reporting date

Currency code according to the International Organisation for Standardisation (ISO code).

China	1 EUR =	8.0225	CNY
UK	1 EUR =	0.89903	GBP
Hong Kong	1 EUR =	9.5142	HKD
Pakistan	1 EUR =	196.5729	PKR
USA	1 EUR =	1.2271	USD

Notes and comments to the list of holdings

Percentages marked < or > are rounded up or down to one decimal place, e. g. < 100.0% = 99.99% or > 0.0% = 0.01%.

1 UniCreditBank AG has concluded profit and loss agreements with the following companies:

	Company	Profit/(loss) transferred € thousands
1.1	Food & more GmbH, Munich	(53)
1.2	HVB Immobilien AG, Munich	(8,337)
	of which relating to 2019	1,200
1.3	HVB Secur GmbH, Munich	731
1.4	HVB Verwa 4 GmbH, Munich	(399)
1.5	MERKURHOF Grundstücksgesellschaft mit beschränkter Haftung, Munich	2,645
1.6	UniCredit Beteiligungs GmbH, Munich	(15)
1.7	UniCredit Direct Services GmbH, Munich	3,353
1.8	UniCredit Leasing GmbH, Hamburg	34,154
1.9	Verwaltungsgesellschaft Katharinenhof mbH, Munich	28
1.10	Wealth Management Capital Holding GmbH, Munich	(20,515)

2 Profit and loss transfer to shareholders and partners.

3 The exemption under Section 264b HGB and under Section 264 (3) HGB applies to the company.

4 Figures from the 2019 annual accounts are indicated for this consolidated company.

5 Where equity capital and net profit are not stated, the information is omitted due to minor importance compliant with Section 286 (3) 1 No. 1 HGB.

6.1 Equity capital amounts to €17,682 thousand and the net profit €4,466 thousand.
6.2 Equity capital amounts to minus €3,176 thousand and the net loss (€3,176 thousand).
6.3 Equity capital amounts to minus €3,304 thousand and the net loss (€3,304 thousand).
6.4 Equity capital amounts to minus €2,483 thousand and the net loss (€2.483 thousand).
6.5 Equity capital amounts to minus €2,151 thousand and the net loss (€2,151 thousand).
6.6 Equity capital amounts to minus €2,743 thousand and the net loss (€2,743 thousand).
6.7 Equity capital amounts to €127 thousand and the net profit/loss €– thousand.

7 Pursuant to Section 340a (4) No. 2 HGB, all holdings in large corporations with a share of voting rights greater than 5 percent.

8 Despite a holding of more than 20%, UniCredit Bank AG has no significant influence over the company on account of the ownership structure and the voting patterns to date.

9 The company is held by a trustee on behalf of UniCredit Bank AG.

10 UniCredit Bank AG holds the position of a limited partner under company law and participates in the profit of the company.

11 UniCredit Bank AG holds the position of a limited partner under company law but does not participate in the profit of the company.

Other Information (Continued)

98 Supervisory Board

Chairman

Gianpaolo Alessandro
(Chairman until 23 June 2020,
since 26 June 2020)

Deputy Chairmen

Florian Schwarz
(Deputy Chairman until 23 June 2020,
since 26 June 2020)

Dr Bernd Metzner
since 23 June 2020
(Deputy Chairman since 26 June 2020)

Dr Wolfgang Sprissler
until 23 June 2020

Members

Paolo Cornetta
until 23 June 2020

Olivier Khayat

Prof Dr Annette G. Köhler

Dr Marita Kraemer
until 23 June 2020

Finja Kütz
since 23 June 2020

Dr Claudia Mayfeld
since 23 June 2020

Klaus-Peter Prinz
until 23 June 2020

Claudia Richter

Thomas Schöner
since 23 June 2020

Oliver Skrbot

Christian Staack

Gregor Völkl

99 Management Board

Sandra Betocchi Drwenski until 31 August 2020	**Chief Operating Officer (COO)**
Markus Beumer	**Commercial Banking – Unternehmer Bank**
Dr Emanuele Buttà until 14 April 2020	**Commercial Banking – Private Clients Bank**
Ljiljana Čortan until 31 October 2020	**Chief Risk Officer (CRO)**
Dr Michael Diederich	**Spokesman of the Management Board Human Capital/Labour and Social Affairs**
Jörg Frischholz since 15 April 2020	**Commercial Banking – Private Clients Bank**
Dr Jürgen Kullnigg since 1 November 2020	**Chief Risk Officer (CRO)**
Jan Kupfer	**Corporate & Investment Banking**
Simone Marcucci since 1 May 2020	**Chief Financial Officer (CFO)**
Boris Scukanec Hopinski since 1 September 2020	**Chief Operating Officer (COO)**
Guglielmo Zadra until 30 April 2020	**Chief Financial Officer (CFO)**

Munich, 9 March 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, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and Management's Discussion and Analysis 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.

Munich, 9 March 2021

UniCredit Bank AG
The Management Board

Beumer	Dr Diederich	Frischholz	Dr Kullnigg

Kupfer	Marcucci	Scukanec Hopinski

Auditor’s Report

INDEPENDENT AUDITOR’S REPORT

To UniCredit Bank AG, Munich

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit Opinions
We have audited the consolidated financial statements of UniCredit Bank AG, Munich, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December2020, the consolidated income statement including the consolidated statement of total comprehensive income, the statement of changes in consolidated shareholders’ equity and the consolidated cash flow statement for the financial year from 1 January to 31 December 2020 as well as the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of UniCredit Bank AG, Munich, for the financial year from 1 January to 31 December 2020.

In our opinion, on the basis of the knowledge obtained in the audit,
– the accompanying consolidated financial statements comply, in all material respects, with the IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e (1) German Commercial Code (HGB) and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2020 and of its financial performance for the financial year from 1 January to 31 December 2020, and
– the accompanying group management report as a whole provides an appropriate view of the Group’s position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to § 322 (3) sentence 1 German Commercial Code (HGB), we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions
We conducted our audit of the consolidated financial statements and of the group management report in accordance with §317 German Commercial Code (HGB) and the EU Audit Regulation (No. 537/2014, referred to subsequently as “EU Audit Regulation”), and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report” section of our auditor’s report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Note on the use of § 315b (2) of the German Commercial Code (HGB)
The Company has not included a non-financial group statement in accordance with § 315b (2) of the German Commercial Code (HGB) in the group management report. At the time of completion of our audit, it was not possible to conclusively assess whether the exemption of § 315b (2) German Commercial Code (HGB) had been justifiably invoked because the requirements of § 315b (2) sentence 1 or sentence 2 German Commercial Code (HGB), by their nature, can only be complied at a later stage. Our audit opinion regarding the group management report is not modified in this respect.

Key Audit Matters in the Audit of the Consolidated Financial Statements
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In the following we present the key audit matters we have determined in the course of our audit:
1. Loan loss provisions in the credit business
2. Determination of the fair value of financial instruments that are measured at fair value and are not equity instruments
3. IT controls related to financial reporting

Our presentation of these key audit matters has been structured as follows:
a) Description (including reference to corresponding information in the consolidated financial statements)
b) Auditor's response
c) Key observations

1. Loan loss provisions in the credit business

a) UniCredit Bank AG provides loans to customers. In the bank's consolidated financial statements, loan loss provisions are offset against the balance sheet item "Loans and receivables with customers". Furthermore, provisions for credit risks are disclosed under other provisions. The main characteristic of risk provisioning in stage 1 and stage 2, according to IFRS 9, is the allocation of financial instruments to the stages, based on the comparison of the current default risk with the default risk at initial recognition of the financial instrument. The allocation leads to the recognition of the loan loss provision to the amount of the expected one-year credit loss or the expected lifetime credit loss of the financial instrument. The loan loss provision of stage 1 and stage 2 is, therefore, largely determined by the models used to determine the stage transfer, the models used to calculate the expected one-year credit loss or the expected lifetime credit loss of the financial instrument respectively, and the parameters used. Significant parameters within the calculation models that affect the expected credit loss are the considerable macroeconomic scenarios, the probability of default, the exposure at default and the loss given default. The risk provisioning of stage 3, in accordance with IFRS 9, is based on assumptions regarding various scenarios for the expected cash flows from the defaulted loans and the estimated probability of occurrence of these scenarios. Both the valuation parameters used and the models for risk provisioning stage 1 and stage 2 have a significant impact on the amount of loan loss provision. Since the determination of the loan loss provision is subject to uncertainty and margin of discretion, this was a key audit matter in our audit. The disclosures regarding the loan loss provisions are enclosed in sections 13 and 54 of the notes to the consolidated financial statements.

b) As part of the audit of the consolidated financial statements, we have initially audited the adequacy and operating effectiveness of the internal controls regarding the recording, processing and valuation of loans as well as the related financial reporting. In doing so, we also took into account the relevant business organization, including the significant IT systems and valuation models. The audit of the valuation of loans included the assessment of the implemented processes and controls for identifying impaired loans, as well as an assessment of the models used to determine the stage transfer between stage 1 and stage 2, and the evaluation of the models used to determine the expected one-year credit loss or the expected life time credit loss of the financial instrument. We have used specialists from our Risk Advisory division specialised in credit risk management and IT audit for our audit. The group-wide valuation models for the determination of the loan loss provision of stage 1 and stage 2 were audited by our colleagues from Deloitte & Touche S.p.A., Milan (Italy), as these models were developed and validated by the Bank's parent company in Milan. We have used the results of their audit for our purposes. Likewise, we have used the validation reports and third-party audit reports. In addition, for a sample of financial instruments measured at amortised cost, we audited the stage 1 and stage 2 loan loss provision by auditing the stage allocation as well as the calculated expected loss. For the audit of the stage 3 loan loss provision, our focus was on the significantly impaired loans, since there are areas of judgement and these have a material impact on the valuation of loans and the recognition of loan loss provisions. We have evaluated the valuation for a sample of the loans based on bank-internal forecasts of the future income and liquidity position of borrowers and assessed the appropriateness of the information basis used for planning purposes. In doing so, we have critically challenged and assessed the underlying assumptions of the Executive Directors, with regard to the various expected cash flows of the audited loans, respectively the recovery of collaterals. Similarly, we assessed for the loans in our sample the probabilities of occurrence of the used scenarios with regard to their comprehensibility.

c) We challenged significant assumptions and estimates made by the Executive Directors. Overall, the risk provisions are within acceptable ranges.

2. Determination of the fair value of financial instruments that are measured at fair value and are not equity instruments

a) Financial instruments assets, which are valued at fair value and are not equity instruments, are disclosed in the consolidated financial statements under the balance sheet items “Financial assets held for trading”, “Financial assets aFVtPL”, “Financial assets aFVtOCI“, and “Hedging derivatives”. Similarly, financial instruments liabilities at fair value are disclosed under the balance sheet items „Financial liabilities held for trading“, “Financial liabilities aFVtPL” and “Hedging derivatives“. The valuation of these financial instruments was identified as a key audit matter as it is subject to complex accounting principles, valuation procedures and -methods and is partially based on estimates and assumptions made by the Executive Directors. The disclosures made by the Executive Directors regarding the valuation of financial instruments are enclosed in sections 8, 79 and 80 of the notes to the consolidated financial statements.

b) We have audited the organizational structure and related processes with regards to the determination of the fair value of financial instruments, which are measured at fair value and that are not equity instruments by examination of the adequacy and operating effectiveness of the implemented key controls. In particular, our audit included the independent verification process for pricing, the validation of valuation methods and assumptions, the approval process for new financial instruments, the audit of controls for recording contractual and valuation inputs, the flow of market data, the governance and the reporting processes. The calculated fair values are adjusted for the Group’s creditworthiness, counterparty credit risk, model risk, bid-ask spread, refinancing costs and expected costs in connection with the liquidation of less actively traded instruments. With respect to these adjustments, we examined whether the Bank’s assumptions, procedures and models are in line with standard industry practice and we audited whether the valuations are correct and comprehensible. In addition, we have conducted our own independent valuation on a sample of financial instruments and compared our results with the valuation performed by the Bank. We have used valuation specialists from our Risk Advisory division for our audit. Noteworthy issues from disputes with counterparties and extraordinary gains or losses from the sale of financial instruments were investigated.

c) The valuation methods selected by the Executive Directors of the Bank for the determination of the fair value of financial instruments, which are measured at fair value and that are nit equity instruments are in line with industry standards.

3. IT controls related to financial reporting

a) For the preparation of the consolidated financial statements, the Bank uses a large number of IT applications that have numerous interfaces. In order to maintain the integrity of the data used for the preparation of the consolidated financial statements, the Bank has taken various precautionary measurements and implemented controls. The Bank has outsourced its IT services, to a large extent, to UniCredit Services S.C.p.A., Milan (Italy), which has further outsourced a part of these services to other service providers. The IT controls related to financial reporting has been selected as a key audit matter, as the security of information affects many aspects of the accounting and financial reporting process, results in a large audit effort and is characterised by a high level of complexity. We refer to the disclosure of the Executive Directors in section 4 Operational Risk in the risk report of the group management report with regards to the outsourcing of IT services.

b) Based on our risk assessment, we have audited the design, implementation and operating effectiveness of the controls related to user rights and change management processes for the significant accounting-relevant IT applications by using IT specialists from our Risk Advisory division. In doing so, we agreed the scope of the ISAE 3402 audit with the ISAE 3402 auditor at UniCredit Services S.C.p.A. and the group auditors of UniCredit S.p.A. and used the audit results of those. We have informed ourselves of the professional competence, independence and regulatory governance of these auditors. When using these reports, we have inter alia critically assessed the reporting related to these audit procedures and audit results.

c) IT controls related to financial reporting implemented by the Bank were enhanced over the past years.

Other Information
The Executive Directors are responsible for the other information. The other information comprises:
– the Executive Directors' confirmation regarding the consolidated financial statements and to the group management report pursuant to § 297 (2) sentence 4 and § 315 (1) sentence 5 German Commercial Code (HGB) respectively, and
– all the remaining parts of the published annual report,
– except the consolidated financial statement, the content of the audited group management report disclosures and our related auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our group audit, our responsibility is to read the other information and, in so doing, to consider whether the other information
– is materially inconsistent with the consolidated financial statements, the content of the audited group management report disclosures or our knowledge obtained in the audit, or
– otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report
The Executive Directors are responsible for the preparation of the consolidated financial statements, that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e (1) German Commercial Code (HGB) and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the Executive Directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether intentional or unintentional.

In preparing the consolidated financial statements, the Executive Directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the Executive Directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the Executive Directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements, and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 German Commercial Code (HGB) and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional scepticism throughout the audit. We also
– identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
– obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
– evaluate the appropriateness of accounting policies used by the Executive Directors and the reasonableness of estimates made by the Executive Directors and related disclosures.
– conclude on the appropriateness of the Executive Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report, or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
– evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRS as adopted by the EU and with the additional requirements of German commercial law pursuant to § 315e (1) German Commercial Code (HGB).
– obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
– evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
– perform audit procedures on the prospective information presented by the Executive Directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the Executive Directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the audit of the electronic reproductions of the consolidated financial statements and group management report prepared for disclosure purposes in accordance with § 317 (3b) of the German Commercial Code (HGB)

Audit Opinion
In accordance with § 317 (3b) of the German Commercial Code (HGB), we have performed an audit with reasonable assurance to determine whether the reproductions of the consolidated financial statements and the group management report (hereinafter also referred as "ESEF documents") contained in the attached electronic file, which has the SHA-256 value 5ACDBF4C91B6C8AC8F5 EB76675A7644093D2D1400BC2C6720CBF43BACCDA0142 and prepared for disclosure purposes comply in all material respects with the requirements of § 328 (1) of the German Commercial Code (HGB) on electronic reporting format ("ESEF format"). In accordance with German legal requirements, this audit extends only to the conversion of the information contained in the consolidated financial statement and the group management report into the ESEF format and therefore neither to the information contained in these reproductions nor to any other information in the above mentioned electronic file.

In our opinion, the reproductions of the consolidated financial statements and the group management report contained in the above mentioned attached electronic file prepared for disclosure purposes comply in all material respect with the electronic reporting format requirement of § 328 (1) German Commercial Code (HGB). We do not express any opinion on the information contained in these reproductions nor on any other information contained in the above-mentioned electronic file beyond this audit opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from January 1 to December 31, 2020 contained in the "Report on the Audit of the Consolidated Financial Statements and of the Group Management Report" above.

Basis for the audit opinion
We conducted our audit of the reproductions of the consolidated financial statements and the group management report contained in the above mentioned attached electronic file in accordance with § 317 (3b) German Commercial Code (HGB) and in compliance with the Exposure Draft IDW Audit Standard: Audit of electronic reproductions of financial statements and management reports prepared for the purpose of disclosure pursuant to § 317 (3b) HGB (IDW EPS 410). Our responsibility therefor is further described in the Section "Auditor's responsibility for the audit of the ESEF documents". Our audit firm has complied with the quality assurance system requirements of the IDW quality assurance standard: Requirements for quality assurance in the audit firm (IDW QS 1).

Responsibility of the Executive Directors and the Supervisory Board for the ESEF documents
The company's Executive Directors are responsible for the preparation of the ESEF documents containing the electronic reproductions of the consolidated financial statements and the group management report in accordance with § 328 (1) sentence 4 no. 1 German Commercial Code (HGB) and for the tagging of the consolidated financial statements in accordance with § 328 (1) sentence 4 no. 2 German Commercial Code (HGB).

Furthermore, the company's Executive Directors are responsible for internal controls, which are determined to be necessary to enable the preparation of the ESEF documents free from material – intentional or unintentional – non-compliance with the requirements of § 328 (1) German Commercial Code (HGB) for the electronic reporting format.

The company's Executive Directors are also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and audited group management report as well as other documents to be disclosed to the operator of the federal gazette ("Bundesanzeiger").

The Supervisory Board is responsible for monitoring the preparation of the ESEF documents as part of the financial reporting process.

Group Auditor's responsibility for the Audit of the ESEF documents
Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material – intentional or unintentional – non-compliance with the requirements of § 328 (1) German Commercial Code (HGB). We exercise professional judgment and maintain professional skepticism throughout the audit. In addition, we
– identify and assess the risks of material – intentional or unintentional – non-compliance with the requirements of § 328 (1) German Commercial Code (HGB), plan and perform audit procedures in response to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion.
– obtain an understanding of internal controls relevant to the audit of the ESEF documents in order to plan audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the operating effectiveness of these controls.
– evaluate the technical validity of the ESEF documents, i.e. whether the electronic file containing the ESEF documents comply with the requirements of the Delegated Regulation (EU) 2019/815, as applicable at the date of the financial statements, regarding the technical specification for that electronic file.
– evaluate whether the ESEF documents allow an identical XHTML reproduction of the audited consolidated financial statements and the audited group management report
– evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) allow an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further Information pursuant to Article 10 of the EU Audit Regulation
We were elected as group auditor by the annual general meeting on June 23, 2020. We were engaged by the Supervisory Board on July 17, 2020. We have been the group auditor of UniCredit Bank AG, Munich, without interruption since the financial year 2013.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

In addition to the financial statement audit, we have provided to group entities the following services that are not disclosed in the consolidated financial statements or in the group management report:
– Audits and reviews of reporting packages
– Audits pursuant to § 89 of the Securities Trading Act
– Audit of the internal control system of a service organization
– Performing agreed upon and audit procedures
– Audits of financial information or their components
– Review of an assignment of findings to process areas

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Christian Schweitzer.

Munich, 12 March 2021

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Christian Schweitzer)	(Stefan Trenzinger)
Wirtschaftsprüfer	Wirtschaftsprüfer
German Public Auditor	German Public Auditor

The translation of the Independent Auditor's Report is for convenience only; the German version prevails.

Corporate Governance

List of Executives and Outside Directorships

Supervisory Board

NAME, OCCUPATION, PLACE OF RESIDENCE	POSITIONS ON STATUTORY SUPERVISORY BOARDS OF OTHER GERMAN COMPANIES[1]	POSITIONS ON COMPARABLE BOARDS OF GERMAN AND FOREIGN COMPANIES[1]
Gianpaolo Alessandro Group General Counsel, Head of Group Legal and Secretary of the Board of Directors of UniCredit S.p.A., Milan Chairman (until 23 June 2020, since 26 June 2020)		Compagnia Aerea Italiana S.p.A., Rome MidCo S.p.A., Rome
Florian Schwarz Employee of UniCredit Bank AG, Munich Deputy Chairman (until 23 June 2020, since 26 June 2020)		
Dr Wolfgang Sprissler until 23 June 2020 Former Board Spokesman of UniCredit Bank AG Sauerlach Deputy Chairman		Dr. Pfleger Arzneimittel, Bamberg (Deputy Chairman)
Dr Bernd Metzner[1,2] since 23 June 2020 Chief Financial Officer of Gerresheimer AG, Düsseldorf Deputy Chairman (since 26 June 2020)	Gerresheimer Bünde GmbH, Bünde (Deputy Chairman) Gerresheimer Regensburg GmbH, Regensburg (Deputy Chairman) Gerresheimer Tettau GmbH, Tettau (Deputy Chairman)	Gerresheimer Glass Inc., Vineland (USA) Centor US Holding Inc., Perrysburg (USA) Centor Inc., Perrysburg (USA) Centor Pharma Inc., Perrysburg (USA) Corning Pharmaceutical Packaging LLC, Wilmington (USA) Senile Medical AG, Olten (Switzerland)
Paolo Cornetta until 23 June 2020 Head of Group Human Capital of UniCredit S.p.A., Milan		
Olivier Khayat Co-CEO Commercial Banking Western Europe of UniCredit S.p.A., Milan		UniCredit Bank Austria AG, Vienna UniCredit International Bank (Luxembourg) S.A., Luxembourg (Deputy Chairman) Kepler Cheuvreux S.A., Paris
Prof Dr Annette G. Köhler University professor and Chair of Accounting, Auditing and Controlling, University of Duisburg-Essen, Faculty of Business Administration – Mercator School of Management, Düsseldorf	DMG MORI AKTIENGESELLSCHAFT, Bielefeld, Villeroy & Boch Aktiengesellschaft, Mettlach, until 29 February 2020 GEA Group Aktiengesellschaft, Düsseldorf, since 1 October 2020	DKSH Holding AG, Zurich

1 As at 31 December 2020.
2 Other directorships (compare Article 435 (2a) CRR): Dr Bernd Metzner holds three other directorships within the Gerresheimer Group.

NAME, OCCUPATION, PLACE OF RESIDENCE	POSITIONS ON STATUTORY SUPERVISORY BOARDS OF OTHER GERMAN COMPANIES[1]	POSITIONS ON COMPARABLE BOARDS OF GERMAN AND FOREIGN COMPANIES[1]
Dr Marita Kraemer until 23 June 2020 Former member of the Management Board of Zurich GI Management Aktiengesellschaft (Deutschland), and former member of the Management Board of Zurich Service GmbH, Frankfurt am Main	Allianz Deutschland AG, Munich, until 19 March 2020	Allianz France S.A., Paris
Finja Kütz since 23 June 2020 Group Chief Transformation Officer and Deputy COO of UniCredit S.p.A. Munich		UniCredit Services S.C.p.A, Milan
Dr Claudia Mayfeld since 23 June 2020 Lawyer, Dortmund		
Klaus-Peter Prinz until 23 June 2020 Employee of UniCredit Bank AG, Luxembourg Branch, Trier		
Claudia Richter Employee of UniCredit Bank AG, Fürth		
Thomas Schöner since 23 June 2020 Employee of UniCredit Bank AG Luxembourg Branch, Saarwellingen		
Oliver Skrbot Employee of UniCredit Bank AG, Buttenwiesen		
Christian Staack Employee of UniCredit Bank AG, Hamburg		
Gregor Völkl Unit manager of Vereinte Dienstleistungsgewerkschaft ver.di Unit 1 – Financial Services Munich district, Munich		

1 As at 31 December 2020.

List of Executives and Outside Directorships (Continued)

Supervisory Board committees[1,2]

Audit Committee
Dr Wolfgang Sprißler, Chairman (until 23 June 2020)
Dr Bernd Metzner, Chairman (since 26 June 2020, Chairman since 29 June 2020)
Olivier Khayat (until 23 June 2020)
Finja Kütz (since 26 June 2020)
Prof Dr Annette G. Köhler (until 23 June 2020, since 26 June 2020)
Oliver Skrbot (until 23 June 2020, since 26 June 2020)

Nomination Committee
Gianpaolo Alessandro, Chairman
(Chairman until 23 June 2020, Chairman since 30 June 2020)
Olivier Khayat (since 26 June 2020)
Prof Dr Annette G. Köhler (since 26 June 2020)
Florian Schwarz (until 23 June 2020, since 26 June 2020)
Dr Wolfgang Sprißler (until 23 June 2020)

Remuneration Control Committee
Paolo Cornetta, Chairman (until 23 June 2020)
Gianpaolo Alessandro, Chairman (since 26 June 2020, Chairman since 30 June 2020)
Olivier Khayat (since 26 June 2020)
Dr Claudia Mayfeld (since 26 June 2020)
Florian Schwarz (until 23 June 2020, since 26 June 2020)
Dr Wolfgang Sprißler (until 23 June 2020)

Risk Committee
Dr Marita Kraemer, Chairwoman (until 23 June 2020)
Dr Claudia Mayfeld, Chairwoman
(since 26 June 2020, Chairwoman since 26 June 2020)
Gianpaolo Alessandro (until 26 June 2020)
Olivier Khayat (since 26 June 2020)
Finja Kütz (since 26 June 2020)
Christian Staack (until 23 June 2020, since 26 June 2020)

Trustees[1]

Trustees for Pfandbrief operations pursuant to Section 7 of the German Pfandbrief Act

Bernd Schreiber
President of the Bavarian Department of State-owned Palaces, Gardens and Lakes, Markt Schwaben

Deputies

Stefan Höck
Chief Ministerialrat in the Bavarian State Ministry of Finance and Regional Identity, Hohenschäftlarn

Robert Saliter
Ministerialdirigent (Director-General) in the Bavarian State Ministry of Finance and Regional Identity, Munich

1 As at 31 December 2020.
2 See also the Report of the Supervisory Board.

Management Board

NAME	POSITIONS ON STATUTORY SUPERVISORY BOARDS OF OTHER GERMAN COMPANIES[1]	POSITIONS ON COMPARABLE BOARDS OF GERMAN AND FOREIGN COMPANIES[1]
Sandra Betocchi Drwenski born 1958 until 31 August 2020 Chief Operating Officer (COO)	HVB Immobilien AG, Munich (Chairwoman)[2], until 12 July 2020	UniCredit Services S.C.p.A., Milan, until 7 April 2020
Markus Beumer born 1964 Commercial Banking – Unternehmer Bank	DAW SE, Ober-Ramstadt	UniCredit Leasing GmbH, Hamburg (Chairman)[2] UniCredit Leasing Finance GmbH, Hamburg (Chairman)[2]
Dr Emanuele Buttà born 1966 until 14 April 2020 Commercial Banking – Private Clients Bank	WealthCap Kapitalverwaltungsgesellschaft mbH, Munich (Deputy Chairman)[2], until 31 March 2020	Wealth Management Capital Holding GmbH, Munich (Deputy Chairman)[2], until 31 March 2020
Ljiljana Čortan born 1971 until 31 October 2020 Chief Risk Officer (CRO)	HVB Immobilien AG, Munich[2], until 31 October 2020 WealthCap Kapitalverwaltungsgesellschaft mbH, Munich[2], until 31 March 2020	Wealth Management Capital Holding GmbH, Munich[2], 31 March 2020
Dr Michael Diederich born 1965 Board Spokesman Human Capital/Labour & Social Affairs		ESMT European School of Management and Technology GmbH, Berlin FC Bayern München AG, Munich
Jörg Frischholz born 1976 since 15 April 2020 Commercial Banking – Private Clients Bank		
Dr Jürgen Kullnigg born 1961 since 1 November 2020 Chief Risk Officer (CRO)	HVB Immobilien AG, Munich[2], since 9 November 2020	
Jan Kupfer born 1964 Corporate & Investment Banking	Bayerische Börse Aktiengesellschaft, Munich	
Simone Marcucci born 1966 since 1 May 2020 Chief Financial Officer (CFO)		Zagrebačka banka d.d., Zagreb (Chairman)
Boris Scukanec Hopinski born 1981 since 1 September 2020 Chief Operating Officer (COO)	HVB Immobilien AG, Munich (Chairman)[2], since 13 July 2020 WealthCap Kapitalverwaltungsgesellschaft mbH, Munich (Deputy Chairman since 29 June 2020)[2]	UniCredit Services S.C.p.A., Milan, since 7 April 2020 Wealth Management Capital Holding GmbH, Munich (Deputy Chairman since 29 June 2020)[2]
Guglielmo Zadra born 1972 until 30 April 2020 Chief Financial Officer (CFO)		

1 As at 31 December 2020.
2 Group directorship.

Report of the Supervisory Board

In the year under review, the Supervisory Board of UniCredit Bank AG (hereinafter referred to as "HVB" or "Bank") discharged the responsibilities incumbent on it by law, the Articles of Association and its By-Laws and within that framework advised the Management Board on the running of the Bank, continuously monitored its management activities and thus satisfied itself of the legality and regularity thereof, which gave no cause for complaint. The Supervisory Board focused on the economic and financial performance of HVB Group, the implementation of the business and risk strategies including the ICT strategy as well as the Team 23 strategic plan at HVB Group and closely monitored the effects that the coronavirus pandemic is having on the business, financial and risk situation of HVB Group. The Management Board informed the Supervisory Board regularly, promptly and comprehensively of the business situation and the economic position of the individual business units, business policies and fundamental issues concerning corporate management and planning. The Supervisory Board examined the financial development of the Bank and HVB Group, their profitability and earnings situation, liquidity and capital management and the risk situation. The Management Board also submitted a full report on significant transactions, legal risks, internal and governmental investigations of the Bank in Germany and abroad, compliance topics and other events of considerable importance to the Bank. This happened primarily during the meetings of the Supervisory Board and its committees, but also outside meetings in written form. In addition, important topics and pending decisions were discussed at regular meetings between the Spokesman of the Management Board and the Chairman of the Supervisory Board. The Supervisory Board was directly consulted at an early stage on decisions of fundamental importance for the Bank, engaged in comprehensive consultations on the matters at hand and, insofar as this was indicated, voted on the same after conducting an appropriate review. Resolutions of the Supervisory Board were also passed outside meetings, as required.

Meetings of the Supervisory Board

The Supervisory Board held eight meetings in the 2020 financial year, two of which were extraordinary meetings, one constituent meeting of the newly elected Supervisory Board following the Annual General Meeting on 23 June 2020 and one strategy workshop in which key strategies for HVB Group were discussed in-depth. The Supervisory Board addressed the following subjects in particular:

The first meeting of the year on **14 February 2020** focused on the topic of "Business and Risk Strategies of the HVB Group". In a **strategy workshop** held in advance on **12 February 2020**, particularly the HVB Group business strategy incl. CEO, CFO, CRO and COO, the strategies of Commercial Banking (Unternehmer Bank (UBK) incl. Wealth Management (WM) and Private Clients Bank (PBK)) and Corporate & Investment Banking (CIB), the ICT strategy and the risk strategies of the Bank were deliberated on and considered in-depth with the Management Board. The contents and objectives of the new "Team 23" strategic plan were also dealt with in this connection. The Supervisory Board thus discussed the strategies above, including the "Team 23" strategic plan, the budget for the year 2020 and the Multi-Year Plan 2020–2023 of HVB Group, in a condensed form once again with the Management Board at the meeting on 14 February 2020. Based on the integrated risk report of HVB Group Q4/2019, the Chief Risk Officer explained the development of the regulatory ratios, the risk-taking capacity as well as credit and market risk, operational risk, reputational risk, liquidity risk and strategic risk. In this context, the Chief Financial Officer explained the status report on large loan exposures as at 31 December 2019. The Supervisory Board was also briefed on the latest status of preparations for the UK's withdrawal from the EU (Brexit).

In addition, the Supervisory Board considered the 2020 Group Incentive System at HVB for Management Board members, SVPs/EVPs and identified staff as well as the implementation of the 2020 Group Incentive System at HVB for Management Board members. The Supervisory Board also discussed the Long-term Incentive Plan 2020–2023 at HVB for Management Board members, EVPs that are not on the Management Board and other key players as well as the implementation of the Long-term Incentive Plan 2020–2023 at HVB for Management Board members. The Supervisory Board dealt with the total amount proposed as variable remuneration in 2019 for Management Board members and employees of HVB Group ("bonus pool"), target attainment and bonus amounts in 2019 for Management Board members, including the retained variable remuneration from previous years (deferrals), also for former Management Board members. Moreover, the Supervisory Board considered the target attainment and the related variable remuneration under the Long-term Incentive Plan 2017–2019 for current and former Management Board members. The Supervisory Board also addressed the targets for Management Board members in 2020. The Supervisory Board, taking account of the recommendations of the Remuneration Control Committee, adopted resolutions on the matters named above accordingly. In addition, the Supervisory Board, taking account of the recommendations of the Nomination Committee, approved the regular reappointment of Ms Ljiljana Čortan and Mr Jan Kupfer as members of the Management Board with effect from 1 January 2021. The Supervisory Board also appointed Mr Boris Scukanec Hopinski and Mr Simone Marcucci as members of the Management Board with effect from 1 September 2020 and 1 May 2020 respectively.

At the meeting held on **20 March 2020** devoted to the annual financial statements, the Management Board initially reported on the current coronavirus situation and the measures taken by the Bank to protect employees, customers and business associates. The Supervisory Board then discussed the annual and consolidated financial statements for 2019 including the Management Reports with the independent auditor, Deloitte GmbH Wirtschaftsprüfungsgesellschaft (hereinafter referred to as "Deloitte"), and subsequently approved them at the recommendation of the Audit Committee following its own in-depth review. The Supervisory Board also dealt with the report on relations with affiliated companies (Dependency Report), the report of the Audit Committee on the preliminary audit of the 2019 annual financial statements and on the effectiveness of the risk management system (RMS), internal control system (ICS) and internal audit, agreed with the Management Board's proposal on the appropriation of the distributable profit (including a special dividend) and approved the concluding statement by the Management Board concerning the report on relations of HVB with affiliated companies for 2019. The Management Board briefed the Supervisory Board on the issuance of the Group-internal AT1 issue. Moreover, the Management Board informed the Supervisory Board of the current status in identifying potential new sites after the sale of the "Tucherpark" real estate complex. The Supervisory Board also monitored compliance with regulatory provisions by the Management Board and was briefed on human resources work in 2019. The Supervisory Board then focused on reviewing the Management Board's principles for selecting and appointing individuals to senior management level including key function holders and the process for determining Risk Takers in 2020 in HVB Group and, taking account of the recommendations of the Nomination Committee and the Remuneration Control Committee, adopted relevant resolutions. In addition, the Supervisory Board deliberated on succession planning for the Management Board including the diversity strategy and taking account of the recommendations of the Nomination Committee, adopted resolutions on these topics. The Supervisory Board also considered the remuneration packages in 2020 for Management Board members and taking account of the recommendations of the Remuneration Control Committee, adopted the relevant resolution. Furthermore, the Supervisory Board, taking account of the recommendations of the Remuneration Control Committee, adopted resolutions on various topics involving the employment contracts of the Management Board members. The Management Board reported to the Supervisory Board ultimately also for back-testing in this connection.

Through a resolution adopted on **9 April 2020** outside a meeting, the Supervisory Board approved the amicable termination of the term of office of Dr Emanuele Buttà and the appointment of Mr Jörg Frischholz as a member of the Management Board of the Bank with effect from 15 April 2020.

At the meeting on **14 May 2020**, the Management Board reported on the current coronavirus situation and in particular on the measures taken to restrict the number of infections and to ensure business continuity. The Supervisory Board was also briefed on the current status of the OFAC Compliance Programme (OCP) set up in connection with the settlement agreements concluded with US authorities for compliance with US financial sanctions. Another focus was a resolution on an increase in the audit fee for Deloitte in 2019, taking account of the recommendation of the Audit Committee.

Report of the Supervisory Board (Continued)

At another extraordinary meeting held on **17 June 2020**, the Supervisory Board initially dealt with the developments and consequences of the coronavirus situation within HVB Group. In this context, the Management Board provided comprehensive information on the measures taken, in particular to ensure safety and business continuity, to support the supply of liquidity to customers and to expand the Bank's digital offerings. Moreover, the Supervisory Board discussed the positioning of UC Leasing GmbH and the existing strategic options with the Management Board. A further focus of discussion at the Supervisory Board meeting was preparations for the Annual General Meeting of the Bank on 23 June 2020. The Supervisory Board, based on the recommendation of the Audit Committee, adopted a resolution on the appointment of the new auditor from 2022 by the Annual General Meeting on the one hand and based on the recommendation of the Nomination Committee, adopted resolutions on the fit and proper assessments for the election of Supervisory Board members on the other hand. The Supervisory Board also approved the agenda and adopted a resolution on the Supervisory Board's proposals for the Annual General Meeting on individual agenda items, particularly concerning the election of Supervisory Board members to represent shareholders and, based on the recommendation of the Audit Committee, the election of the Bank's independent auditor and auditor of the consolidated financial statements for the 2020 financial year as well as the appointment of the new auditor from the 2022 financial year. Finally, the Supervisory Board addressed the topic of monitoring and managing potential conflicts of interest of the Management Board and the Supervisory Board and based on the recommendations of the Nomination Committee, adopted relevant resolutions. In addition, the Supervisory Board approved an adjustment of its By-laws with effect from 26 June 2020.

The constituent meeting of the Supervisory Board was held on **26 June 2020**, at which the Chairman and the Deputy Chairmen of the Supervisory Board and members of the committees were elected.

Based on the recommendation of the Audit Committee, the Supervisory Board approved the award of the audit engagement for the audit of the 2020 financial statements, including the specification of audit focus areas and the remuneration, to Deloitte on **1 July 2020** outside a meeting.

At the meeting held on **31 July 2020,** the Management Board informed the Supervisory Board of further developments in connection with the coronavirus pandemic. The Management Board then presented an interim report on the status of implementation of the business strategy and the budget for 2020 and discussed the performance of HVB Group including Team 23. The Management Board also explained the business development of the Bank and the results for the first half of 2020 (Half-yearly Financial Report) to the Supervisory Board. In addition, the Supervisory Board discussed preparations in view of the UK's withdrawal from the EU (Brexit), the possible sites after the sale of the "Tucherpark" real estate complex, the relocation of payment transactions processing and an adjustment to D&O conditions. Furthermore, the Supervisory Board considered the structure of the 2020 Group Remuneration Policy for all employees of HVB Group and the implementation of this policy also for the Management Board. The Supervisory Board also addressed the review of the structure of the remuneration systems in 2020 for employees based on the Management Board's remuneration report and the appropriateness of the remuneration in 2019 for the heads of the Risk Controlling function, the Compliance function and Risk Takers. Based on the recommendations of the Remuneration Control Committee, the Supervisory Board adopted resolutions on the matters above. The Management Board also informed the Supervisory Board of future changes in the distribution of responsibilities on the Management Board and of a change in the management of the Internal Audit with effect from 1 January 2021.

At an extraordinary meeting of the Supervisory Board on **16 October 2020,** Dr Michael Diederich was prematurely re-elected by the Supervisory Board as a member of the Management Board with effect from 1 January 2021 until the end of 31 December 2024. Dr Jürgen Kullnigg was appointed to the Management Board with effect from 1 November 2020 until the end of 31 December 2023 to succeed Ms Ljiljana Čortan. In both cases, the Supervisory Board elected these members on the basis of recommendations by the Nomination and Remuneration Control Committee.

At the meeting held on **20 November 2020,** the Management Board informed the Supervisory Board of the current coronavirus situation, business development and the results of the first nine months of 2020 (discussion of the figures as at 30 September 2020). Furthermore, the Management Board gave a report on the status of implementation of the Multi-Year Plan for 2020–2023 as well as on the performance of Commercial Banking UBK/PBK incl. WM and CIB.

The Supervisory Board was again informed in detail of the current status regarding the relocation of payment transactions processing, the possible alternative sites in connection with the sale of the "Tucherpark" real estate complex and of the latest status of the OFAC Compliance Programme (OCP) to implement the settlement agreements concluded with US authorities for compliance with US financial sanctions. Moreover, the Supervisory Board considered the effectiveness of the framework for internal governance issues of HVB and the implementation of the risk culture of HVB. The Supervisory Board also considered the implementation and maintenance of an effective conflict of interest policy for employees and the Management Board of HVB. The Supervisory Board adopted relevant resolutions on the above topics. Based on the preparations carried out at the meeting of the Nomination Committee on 14 October 2020, the Supervisory Board also discussed succession planning for the Supervisory Board of HVB including the diversity strategy and adopted relevant resolutions.

Legal disputes as well as internal and external investigations
The Supervisory Board solicited information and deliberated on important legal disputes and proceedings on a regular basis last year. External legal advisers were called in on individual issues to provide advice to the Supervisory Board. In particular, the Supervisory Board discussed the current state of affairs concerning the measures implemented for the OFAC Compliance Programme (OCP) that was set up by the Bank in connection with the settlement agreements concluded with the US authorities in order to end the investigations on compliance with US financial sanctions.

When required, meetings were also held, or individual agenda items were considered, without the participation of the Management Board. Prior to every Supervisory Board meeting, the Supervisory Board members representing the employees and those representing the shareholders had the opportunity to address the topics of the meeting in question in preliminary discussions, also with the Management Board. Potential conflicts of interests of individual Supervisory Board members were disclosed and taken into account, as far as there were any.

Supervisory Board committees
To efficiently perform its tasks, the Supervisory Board set up a Nomination Committee, a Remuneration Control Committee, a Risk Committee and an Audit Committee from among its members. Each committee elected a chairman. The composition of the committees is shown in the "Supervisory Board" list in this Annual Report. The responsibilities of each of the committees are defined in the By-Laws of the Supervisory Board.

The cooperation and sharing of content among the individual committees is ensured by at least one member of each committee sitting on another committee. The chairs of the committees coordinated inter-committee topics with the Management Board member responsible in each case and among one another to strengthen cooperation in the committees as a whole. They also exercised their rights to information vis-à-vis the head of the Internal Audit and the Chief Compliance Officer as well as the level below the Management Board, where agreed with the Management Board. As far as necessary, the committees adopted resolutions or gave recommendations to the Supervisory Board for adopting resolutions, also outside of meetings. The chairs of all the committees reported in detail at the next respective plenary session of the Supervisory Board on the topics of the committees' discussions, the outcome thereof and the resolutions passed by the committees.

Nomination Committee
The Nomination Committee met four times in the past year and in particular performed its duties as defined in Section 25d (11) of the German Banking Act (Kreditwesengesetz – KWG). This consisted above all in assisting the Supervisory Board in succession planning on the Management Board and on the Supervisory Board. In particular, it prepared the reappointment of three members to the Management Board and the appointment of new members to both the Management Board and the Supervisory Board (including a fit and proper assessment). The Nomination Committee also reviewed the Management Board's principles for selecting and appointing individuals to senior management level and supported the Supervisory Board in making corresponding recommendations to the Management Board. With the support of an external, independent consultant (auditing company), the Nomination Committee prepared the annual evaluation of the Management Board and the Supervisory Board pursuant to Section 25d (11) KWG at the end of 2020 and issued recommendations for action to the Supervisory Board in this connection at the meeting held on 12 February 2021.

Report of the Supervisory Board (Continued)

Remuneration Control Committee

In the past year, the Remuneration Control Committee met four times and also met once in a joint meeting with the Risk Committee. In particular, this committee performed the tasks defined in Section 25d (12) KWG and in the German Ordinance on the Supervisory Requirements for Institutions' Remuneration Systems (Institutsvergütungsverordnung – InstitutsVergV). In the 2020 financial year, the Remuneration Control Committee discussed the appropriateness of the remuneration systems for the employees in the 2019 financial year on the basis of the Remuneration Control Report 2019 of the Bank's Remuneration Officer. Based on this report, it held a joint meeting with the Risk Committee to review relevant interfaces between the remuneration system and the risk management system in order to analyse the effects of the remuneration systems on the risk, capital and liquidity situation of the Bank and HVB Group. It also focused on ensuring that the remuneration systems comply with requirements, in particular those set out in Section 4 InstitutsVergV, and are aligned with the goals defined in the business and the risk strategy of the Bank, also taking account of the corporate culture. The committee also solicited a presentation of the 2020 annual plan of the Remuneration Officer. Furthermore, it discussed the appropriateness of the total amount of variable remuneration for the Management Board and the employees of HVB Group for the 2019 financial year, discussed the evaluation of Management Board members' performance, the determination of the respective variable remuneration for the 2019 financial year and the targets set for the individual Management Board members in the 2020 financial year. It then gave corresponding recommendations to the Supervisory Board. It also discussed the appropriateness of the design of the 2020 Group Remuneration Policy for all employees of HVB Group and the 2020 Group Incentive System and the Long-term Incentive Plan 2020–2023 of UniCredit S.p.A. at HVB and recommended to the Supervisory Board that this system also be implemented for Management Board members. The Remuneration Control Committee assisted the Supervisory Board in reviewing the appropriateness and customary level of the remuneration packages for Management Board members in 2020. It also supported the Supervisory Board in monitoring the process of determining the Risk Takers in 2020 of HVB Group pursuant to Section 15 (3) InstitutsVergV. Moreover, it supported the Supervisory Board in monitoring the appropriateness of remuneration in 2019 for the heads of the Risk Control function, the Compliance function, the Risk Takers and the appropriateness of the structure of the 2020 remuneration systems for employees based on the 2020 remuneration report of the Management Board. The Remuneration Control Committee monitored the proper involvement of the internal control functions and all other relevant areas in the structuring of the remuneration systems. Furthermore, the committee discussed employment contracts of Management Board members in connection with new appointments and reappointments and discussed the contractual arrangements as well as the remuneration of the Management Board members in detail in order to make recommendations to the Supervisory Board in this regard. Independent external legal advisers were consulted in individual cases. The Remuneration Officer assisted the Remuneration Control Committee in all of its monitoring and structuring duties with respect to all employee remuneration systems.

Risk Committee

The Risk Committee met five times in the past year and also held one joint meeting with the Remuneration Control Committee and one with the Audit Committee. The independent auditor and the head of the Internal Audit attended all the committee meetings to provide information. The Risk Committee advised the Management Board in particular on the current and future overall risk appetite and risk strategy of HVB Group and helped the Supervisory Board to monitor the implementation of that strategy by the senior management. In compliance with the Minimum Requirements for Risk Management (Mindestanforderungen an das Risikomanagement – MaRisk) for banks, the Risk Committee received monthly risk reports. The Chief Risk Officer used the integrated risk reports in the meetings to explain the development of the regulatory financial ratios, risk taking capacity, credit risk, market risk, operational risk, reputational risk, liquidity risk and the strategic risk. In addition, the Risk Committee held discussions in the meetings on individual credit exposures as well as on country, concentration and sector risks. The Risk Committee solicited further reports on the topic of risk and strategy on a regular basis. A focus of discussion on the Risk Committee was the development of HVB's credit risk in the course of the coronavirus crisis as well as the stress test scenarios and the results of stress tests of HVB Group. The efficiency of the risk management system was also the subject of detailed discussion with the Chief Risk Officer, the head of the Internal Audit, the Chief Compliance Officer and the independent auditor. The committee solicited reports on a regular basis concerning the status and the progress of the remediation of relevant internal and external audit findings of the Internal Audit, the Compliance function, the independent auditor and the supervisory authorities. The Risk Committee was informed of the principal findings of audits conducted by the supervisory authorities. At three meetings, the Risk Committee discussed at length with the Management Board, the head of the Internal Audit and the independent auditor whether the terms in the customer business were in harmony with the business model and the risk structure of the Bank (Section 25d (8) KWG) and whether all key financial products and services are consistent with the business model and the risk structure of the Bank (EBA Guidelines on internal governance). At a joint meeting with the Remuneration Control Committee, the Risk Committee used the Remuneration Control Report 2019 of the Remuneration Officer to analyse whether the incentives set by the remuneration system take the risk, capital and liquidity structure of the Bank into account, as well as the probability and due dates of revenues. Furthermore, the Risk Committee was briefed at its meeting and at the joint meeting with the Audit Committee on IT security management and IT organisation, one focus of which was monitoring the outsourcing partner UniCredit Services S.C.p.A. At the joint meeting with the Audit Committee, the two committees also solicited reports in particular on the situation concerning resources in the CRO, CFO and COO business units. Moreover, the top risk assessment of the Internal Audit was discussed with the head of the Internal Audit and an analysis of the Bank's legal risks was discussed with the head of Legal.

Audit Committee

The Audit Committee convened for four meetings in the reporting year and once at a joint meeting with the Risk Committee. Representatives of the independent auditor and particularly also the persons from whom the Audit Committee has a right to obtain information (the head of the Internal Audit and the Chief Compliance Officer) attended all of the committee meetings to advise and to provide information. The key responsibilities of the Audit Committee are to monitor the financial reporting process, the effectiveness of the risk management system, particularly the internal control system including the Compliance function and the internal audit system, and the audit of the financial statements. In the reporting year the meetings thus looked at the preliminary audit of the 2019 annual and consolidated financial statements and the report on relations with affiliated companies, prepared draft resolutions for the Supervisory Board and discussed the 2020 Half-yearly Financial Report and the figures at 31 March and 30 September 2020. The Audit Committee was informed by the independent auditor of the main outcome of the reviews of reporting packages to UniCredit S.p.A. Moreover, the Audit Committee gave in-depth and extensive consideration to the efficiency of the risk management system, particularly the internal control system, the compliance management system and the internal audit system. The efficiency of the individual systems was discussed in-depth with the Management Board, the Internal Audit, the Compliance function and the independent auditor. In this connection the respective Chairwoman of the Risk Committee also reported on the assessment of the audit of the efficiency of the risk management by the Risk Committee at two meetings of the Audit Committee. The Audit Committee discussed the quarterly reports of the Internal Audit and the Compliance function on a regular basis at its meetings. The committee was provided with the annual plan of the Internal Audit and the Compliance function. It solicited regular reports on the status and the progress made in the remediation of the relevant internal and external findings of the Internal Audit, the Compliance function, the independent auditor and the supervisory authorities. The Audit Committee was briefed on key results of audits of the supervisory authorities. It also considered the independent auditor's report on the annual audit of the securities account business according to Section 89 of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG), the Bank's outsourcing arrangements, the report of the Data Protection Officer and the annual report of the Legal department on legal risks at the Bank. The Audit Committee requested quarterly reports on the liquidity situation and from May 2020 onwards, monthly reports. The committee also assessed the qualification and independence of the auditor and the quality of the audit. It prepared the award of the audit engagement by the Supervisory Board including the specification of audit focus areas and a recommendation on the amount of remuneration for the independent auditor. On the basis of Art. 5 paragraph 4 of Regulation (EU) No. 537/2014 (Audit Regulation), the Audit Committee approved the non-audit services of the independent auditor. Members of the Audit Committee were briefed on the latest status of the current audit of the annual financial statements by the independent auditor. The Audit Committee implemented the procedure initiated in 2019 for the change in independent auditors in accordance with the Audit Regulation (audit period 2022 to 2030). At the joint meeting with the Risk Committee, the two committees solicited reports in particular on IT security management and the IT organisation as well as on the situation concerning resources in the CFO, CRO and COO business units. Furthermore, the top risk assessment of the Internal Audit was discussed with the head of the Internal Audit and an analysis of the Bank's legal risks with head of Legal.

Report of the Supervisory Board (Continued)

Training and education

The members of the Supervisory Board took part in the training and educational programmes required for their tasks on their own initiative. In the process, they were appropriately supported by HVB. An internal induction programme was offered especially to new Supervisory Board members and written information was provided for this. HVB offered all Supervisory Board members internal training and educational measures by specialists in the Bank. The topics covered were in particular financial sanctions and the prevention of money laundering, a new digital era (digitalisation and innovation measures at HVB) and stress tests. Members of the Supervisory Board were also able to take part in a corporate governance programme of UC S.p.A.

Annual financial statements for 2020

Deloitte audited the annual financial statements and Management Report of UniCredit Bank AG prepared in accordance with the German Commercial Code (Handelsgesetzbuch – HGB) and the consolidated financial statements and Group Management Report prepared in accordance with International Financial Reporting Standards (IFRS) for the 2020 financial year. The independent auditor issued an unqualified opinion in each case.

The financial statements listed above, together with the Management Board's proposal for the appropriation of the distributable profit and the independent auditors' report were provided to the Supervisory Board. The Audit Committee examined these documents in great detail during the preliminary audit. The lead auditor of the independent auditor reported on the key findings of the audit at the preparatory meeting of the Audit Committee, each of the preliminary discussions and at the subsequent meeting of the Supervisory Board devoted to the annual financial statements. The topics addressed were particularly the internal control system and the risk management system relating to the financial reporting process (ICS) compliant with Section 171 (1) German Stock Corporation Act (Aktiengesetz – AktG). Questions of members of the Supervisory Board were answered in detail and in full. During the meeting of the Audit Committee, the independent auditor also reported on the work performed by the independent auditor in addition to the audit of the financial statements and stated that there were no circumstances speaking against their independence. The Chairman of the Audit Committee reported to the full Supervisory Board on the results of the review by this committee. Upon recommendation by the Audit Committee, the Supervisory Board approved the results of the audit after checking and discussing in-depth all the documents submitted and finding them to be orderly, validated and complete. On the basis of its own examination of the annual financial statements, the consolidated financial statements, the Management Report and Group Management Report as well as the proposal for the appropriation of the distributable profit, the Supervisory Board determined that no objections were to be raised. The Supervisory Board has therefore approved the annual financial statements and the consolidated financial statements prepared by the Management Board. Consequently, the annual financial statements were adopted. The Supervisory Board also concurred with the Management Board's proposal for the appropriation of the distributable profit (incl. special dividend).

UniCredit S.p.A. has held a majority interest in the share capital of HVB since 17 November 2005 and 100% of the share capital of HVB since 15 September 2008. Thus, the Management Board has also produced a report on relations of HVB with affiliated companies for the 2020 financial year in accordance with Section 312 AktG. The report contains the following concluding statement by the Management Board:

"We declare that, based on the circumstances known at the time the legal transactions listed in this report were entered into, or the measures listed in this report were undertaken or omitted, UniCredit Bank AG received appropriate consideration for each transaction and did not suffer any disadvantage as a result of measures undertaken or omitted, or any disadvantages arising were compensated."

Deloitte audited this report and issued the following opinion:

"On the basis of our statutory audit and assessment, we confirm that
1. the actual information contained in the report is correct,
2. the company's performance was not unreasonably high or disadvantages were compensated for the legal transactions mentioned in the report,
3. no circumstances speak in favour of a significantly different assessment to the one given by the Management Board concerning the measures mentioned in the report."

The report of the Management Board on relations with affiliated companies and the related audit report by Deloitte were also forwarded to the Supervisory Board. In the course of the preliminary audit, the Audit Committee and then the full Supervisory Board considered these documents in-depth. The plausibility and consistency, and individual legal transactions between HVB and UniCredit S.p.A. and its affiliated companies were carefully examined together with other cost-generating measures initiated by UniCredit S.p.A. The independent auditor took part in the discussion of the Supervisory Board and the preparatory meeting of the Audit Committee, and gave a report on the principal findings of their audit. The Chairman of the Audit Committee reported to the full Supervisory Board on the results of the review by the committee. Following the examination of the report on relations of HVB with affiliated companies in the 2020 financial year prepared by the Management Board compliant with Section 312 AktG, which did not identify any deficiencies, the Supervisory Board is of the opinion that no objections are to be raised about the concluding statement of the Management Board in this report.

Personnel

The Supervisory Board reappointed Ms Ljiljana Čortan and Mr Jan Kupfer as members of the Management Board with effect from 1 January 2021 in each case. Dr Emanuele Buttà resigned from the Management Board with effect from the end of 14 April 2020. Mr Guglielmo Zadra resigned from the Management Board with effect from the end of 30 April 2020 and Ms Sandra Betocchi with effect from the end of 31 August 2020. The Supervisory Board appointed as members of the Management Board Mr Jörg Frischholz with effect from 15 April 2020, Mr Simone Marcucci with effect from 1 May 2020 and Mr Boris Scukanec Hopinski with effect from 1 September 2020. With effect from the end of 31 October 2020, Ms Ljiljana Čortan resigned from the Management Board. With effect from 1 November 2020, Dr Jürgen Kullnigg was appointed as a member of the Management Board.

With effect from 1 January 2021, the Supervisory Board prematurely reappointed Dr Michael Diederich as a member of the Management Board and as Spokesman of the Management Board of HVB.

The term of office of all the members of the Supervisory Board ended at the end of the Annual General Meeting on 23 June 2020. Dr Marita Kraemer, Dr Wolfgang Sprissler, Mr Paolo Cornetta and Mr Klaus-Peter Prinz resigned from the Supervisory Board as scheduled with effect from the end of the Annual General Meeting on 23 June 2020.

At the Annual General Meeting on 23 June 2020, Mr Gianpaolo Alessandro, Mr Olivier Khayat and Prof Dr Annette G. Köhler were re-elected as members of the Supervisory Board and Ms Finja Kütz, Dr Claudia Mayfeld and Dr Bernd Metzner were newly elected to the Supervisory Board. Ms Claudia Richter, Mr Florian Schwarz, Mr Oliver Skrbot, Mr Christian Staack and Mr Gregor Völkl were re-elected to the Supervisory Board by the committee responsible for the election of employee representatives on the Supervisory Board and Mr Thomas Schöner was newly elected to the Supervisory Board as an employee representative.

At the constituent meeting of the Supervisory Board on 26 June 2020, Mr Gianpaolo Alessandro was elected as the Chairman of the Supervisory Board, Mr Florian Schwarz as the first Deputy Chairman and Dr Bernd Metzner as a further Deputy Chairman of the Supervisory Board.

The Supervisory Board thanks the members who have resigned from the Supervisory Board for their long-term, dedicated and valuable service on this board and also for their commitment and their constructive support for the Bank on the Supervisory Board.

The Supervisory Board would like to thank the Management Board, the employees and the employee representatives for all their hard work and their services in the 2020 financial year, an extraordinary year.

Munich, 26 March 2021

The Supervisory Board

Gianpaolo Alessandro

Chairman

Additional Information

Summary of Annual Financial Data

(€ millions)

OPERATING PERFORMANCE	2020	2019	2018[3]	2017	2016
Net interest	2,413	2,388	2,484	2,541	2,518
Dividends and other income from equity investments	37	24	25	11	57
Net fees and commissions	1,007	973	973	1,103	1,066
Net trading income	662	579	693	928	903
Net gains/(losses) on financial assets and liabilities at fair value	(78)	108	(110)	n/a	n/a
Net gains/(losses) on derecognition of financial instruments					
measured at amortised cost	(3)	13	52	n/a	n/a
Net other expenses/income	603	742	845	399	354
OPERATING INCOME	**4,641**	**4,827**	**4,962**	**4,982**	**4,898**
Payroll costs	(1,451)	(1,453)	(1,468)	(1,600)	(1,668)
Other administrative expenses	(1,231)	(1,220)	(1,364)	(1,443)	(1,536)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(126)	(483)	(183)	(227)	(257)
Operating costs	**(2,808)**	**(3,156)**	**(3,015)**	**(3,270)**	**(3,461)**
OPERATING PROFIT/(LOSS)	**1,833**	**1,671**	**1,947**	**1,712**	**1,437**
Net write-downs of loans and provisions for guarantees and commitments IAS 39	n/a	n/a	n/a	(195)	(341)
Credit impairment losses IFRS 9	(733)	(115)	(16)	n/a	n/a
NET OPERATING PROFIT/(LOSS)[1,2]	**1,100**	**1,556**	**1,931**	**1,517**	**1,096**
Provisions for risks and charges	11	313	(919)	(25)	(193)
Restructuring costs	(35)	(363)	(14)	(7)	(645)
Net income from investments	n/a	n/a	n/a	112	39
Net gains/(losses) on disposals on investments	(4)	(15)	26	n/a	n/a
PROFIT/(LOSS) BEFORE TAX AND IMPAIRMENT ON GOODWILL	**1,072**	**1,491**	**1,024**	**n/a**	**n/a**
Impairment on goodwill	—	(130)	(288)	—	—
PROFIT/(LOSS) BEFORE TAX	**1,072**	**1,361**	**736**	**1,597**	**297**
Income tax for the period	(404)	(533)	(253)	(261)	(140)
PROFIT/(LOSS) AFTER TAX	**668**	**828**	**483**	**1,336**	**157**
CONSOLIDATED PROFIT/(LOSS) OF FULL HVB GROUP	**668**	**828**	**483**	**1,336**	**157**
attributable to the shareholder of UniCredit Bank AG	668	811	465	1,332	153
attributable to minorities	—	17	18	4	4
Cost-income ratio in % (based on total revenues)	60.5	65.4	60.8	65.6	70.7
Earnings per share from continuing operations (€)	—	—	—	—	—
Earnings per share of full HVB Group (€)	0.83	1.01	0.58	1.66	0.19

	2020	2019	2018	2017	2016
Balance sheet figures (€ billions)					
Total assets	338.1	303.6	287.3	299.1	302.1
Shareholders' equity	17.9	18.9	18.3	18.9	20.4
Key capital ratios (in accordance with approved financial statements)	**Compliant with CRR II**	**Compliant with CRR II**	**Compliant with CRR**	**Compliant with Basel III**	**Compliant with Basel III**
Common Equity Tier 1 capital[4] (€ billions)	15.1	15	16.5	16.6	16.6
Core capital (Tier 1 capital)[4] (€ billions)	16.8	15	16.5	16.6	16.6
Risk-weighted assets (€ billions) (including equivalents					
for market risk and operational risk)	80.6	85.5	82.6	78.7	81.6
Common Equity Tier 1 capital ratio[4,5] (%)	18.8	17.5	19.9	21.1	20.4
Core capital ratio (Tier 1 ratio)[4,5] (%)	20.9	17.5	19.9	21.1	20.4
Employees (in full-time equivalents)	12,074	12,194	12,252	13,405	14,748
Branch offices	480	498	503	553	579

1 Net operating profit according to IAS 39 until 31 December 2017.
2 Net operating profit according to IFRS 9 since 1 January 2018.
3 Adjustment due to retrospective application of IAS 40 included.
4 31 December 2020: in accordance with approved financial statements.
5 Calculated on the basis of risk-weighted assets, including equivalents for market risk and operational risk.

Contact

Contacts
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faxing +49 (0)89 378-3325263
You can call up important company announcements as soon as they have been published by visiting our website at www.hvb.de

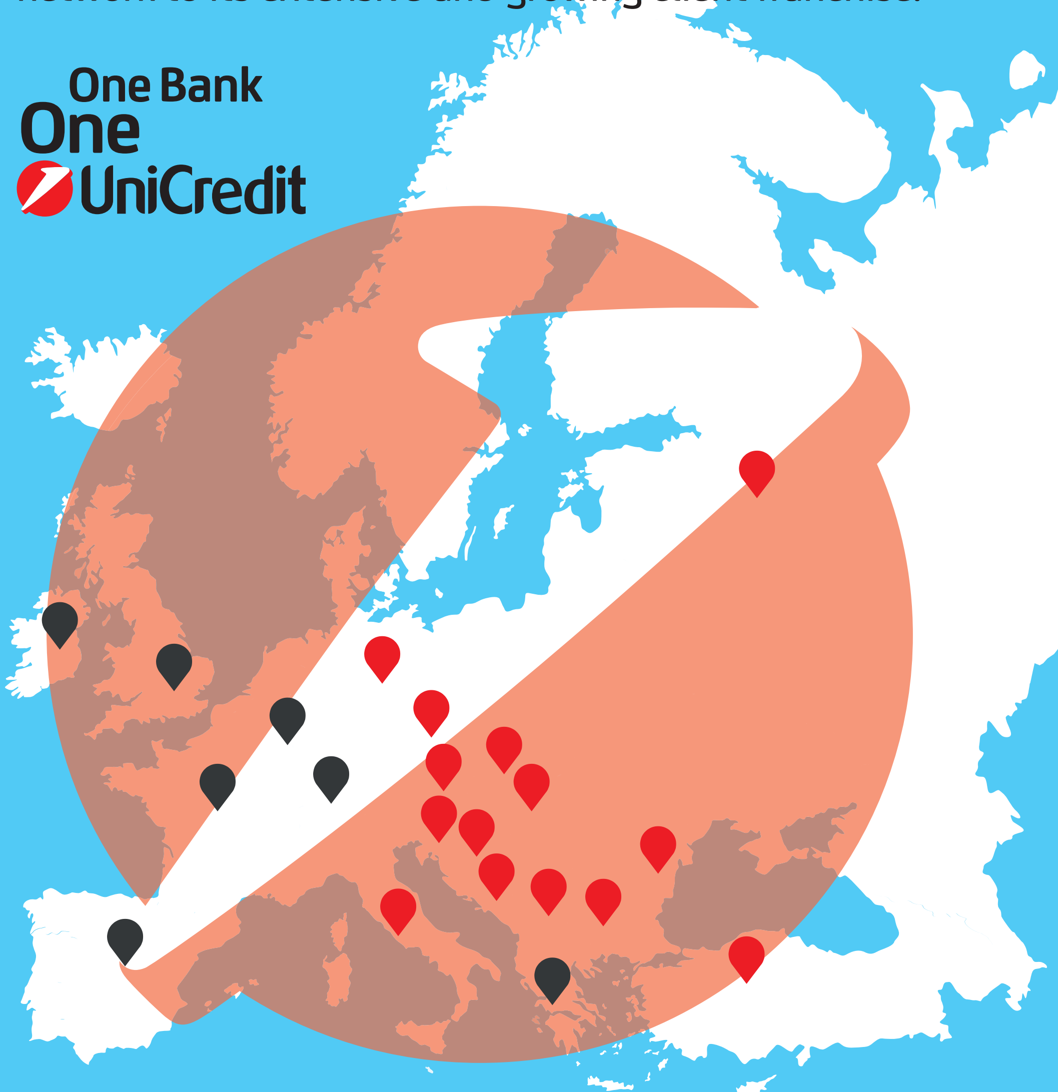
Internet
You can call up interactive versions of our annual and half-yearly financial reports on our website: www.hvb.de

Publications
Annual Report (English/German)
Half-yearly Financial Report (English/German)
You can obtain PDF files of all reports on our website: www.hvb.de

UniCredit S.p.A. Profile

At a glance

UniCredit is a simple successful Pan-European Commercial Bank, with a fully plugged in CIB, delivering a unique Western, Central and Eastern European network to its extensive and growing client franchise.



Commercial banks

International branches and representative offices

LARGE INTERNATIONAL PRESENCE WITH 13 CORE MARKETS AND 16 COUNTRIES WORLDWIDE

Austria
Bosnia and Herzegovina
Bulgaria
Croatia
Czech Republic
Germany
Hungary
Italy
Romania
Russia
Serbia
Slovakia
Slovenia

What we do
We meet real client needs with real solutions which harness synergies between our businesses: CIB, Commercial Banking and Wealth Management.

How we do it
By focusing on banking that matters, we offer local and international expertise, providing unparalleled access to market leading products and services in our core markets.

Our values

Ethics & Respect | Do the right thing!

Ethics and respect: these two values unite us and define our Group culture – how we make decisions and how we act on them. Do the right thing! is a simple, guiding principle to help us live these values every day, everywhere.

Strong global products and local excellence: well-diversified revenues

Our financial highlights

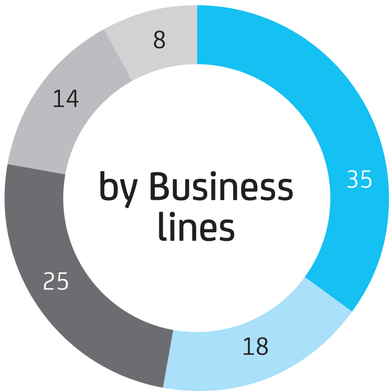
SHAREHOLDERS' EQUITY

€59,507m

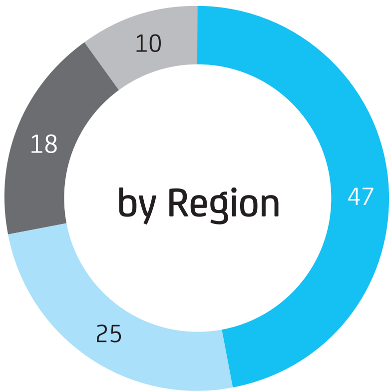
NET RESULT

€-2,785m

Revenues[1] (%)

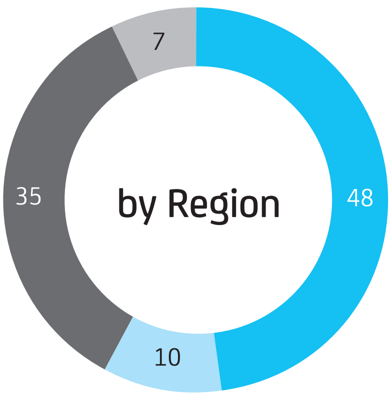


- Commercial Banking Italy
- CEE Division
- CIB
- Commercial Banking Germany
- Commercial Banking Austria



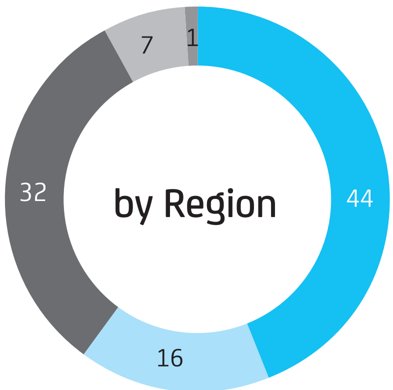
- Italy
- Germany
- CEE
- Austria

Customers[1] (%)



- Italy
- Germany
- CEE
- Austria

Employees[1] (%)



- Italy
- Germany
- CEE
- Austria
- Other

1) as at 31 December 2020

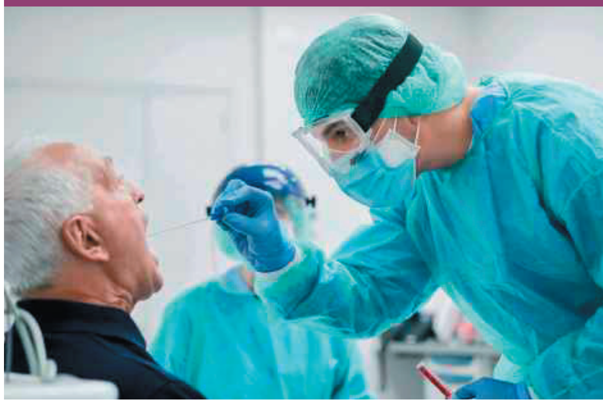
Do the right thing!

€500,000 FOR THE RED CROSS

During the Covid-19 pandemic, UniCredit made donations to the Red Cross in Italy, Bosnia & Herzegovina, and Croatia.

"Your generous contribution will help, through our work, the entire Italian population forced to face this moment of emergency linked to the spread of the new Coronavirus. Thanks to your donation, the Italian Red Cross continues to expand, investing in services, resources and training for volunteers and operators to be alongside those who need it most."

Francesco Rocca
President of the Italian Red Cross



SUPPORTING MEDICAL INNOVATION

UniCredit provided €250,000 to build the first CURA Pod prototype, an intensive care unit made from a shipping container. The first unit was transported to Turin where it was used to treat Covid-19 patients.

MAKING AN IMPACT ACROSS EUROPE

UniCredit Social Impact Banking has now disbursed €225.1 million of impact financing and microcredit loans. New projects in 2020 included the launch of a dedicated offer in Italy to support female entrepreneurship and profit and non-profit businesses with a focus on women and the family, and financing for new facilities to support young people with disabilities in Germany.

SUPPORTING SOCIAL ENTREPRENEURSHIP

By partnering with **Finance 4 Social Change**, UniCredit's Social Impact Banking initiative is supporting social entrepreneurship as a driver of sustainable development in eight different UniCredit countries, including: Austria, Bulgaria, Croatia, Germany, Hungary, Romania, Serbia and Slovakia.

MILLIONS DONATED TO EUROPEAN HOSPITALS

Thanks to donations from UniCredit employees and the UniCredit Foundation, €1.2 million was raised to help hospitals in Italy. On top of this, UniCredit and its local banks donated more than €2.5 million to hospitals and healthcare services in Bulgaria, Czech Republic, Italy, Serbia and Slovakia.

for our Communities

Thanks to UniCredit's strong position, we were able to support communities in all of our countries. Formal initiatives such as UniCredit's Social Impact Banking and the UniCredit Foundation were supplemented by a wide range of volunteering activities and donations, including millions of euros donated by UniCredit employees and customers.

SUPPORTING ARTISTS AND LIVE MUSIC

UniCredit's smart phone bank, buddybank, launched **Niente Di Strano**, a series of six music concerts to support the Italian music industry. The live-streamed events attacted over 3 million YouTube views.

€1m

DONATED TO 11 SOCIAL AND CULTURAL ORGANISATIONS IN GERMANY

SHARING INSIGHTS

In 2020, UniCredit launched several success initiatives to support clients. These include **START-UP ACADEMY**, a managerial programme for 60 Italian start-ups, a series of events focused on the ESG aspects of corporate financing attended by over 1,100 clients from Italy, Germany, Austria and the CEE, and **ITALY TECH DAY 2020**, an annual event to showcase Italian innovation and support the start-up industry.

SUPPORTING ECOMMERCE

UniCredit partnered with Google to develop **UniCredit Easy ECommerce** to help Italian companies access digital markets and boost their B2C e-commerce. Only 30% of Italian companies have an e-commerce website and just 10% currently sell online, creating a huge digital opportunity.

for our Clients

2020 was a challenging year for clients of all sizes. From billion euro funding programmes for multinational companies to mentoring new start-up businesses, UniCredit was committed to being part of the solution.

€10 MILLION OF NEW FINANCING FOR A 100-YEAR OLD PASTA MAKER

The loan was used to meet the working capital needs of Gragnano-based Pastificio Di Martino. It was also the first large loan issued in under Italy's guaranteed loans programme.

"Thanks to this deal, we can better absorb the shock to our production chain from the spread of Covid-19, meet our working capital needs and ensure the continuity of operations and the supply of our products."

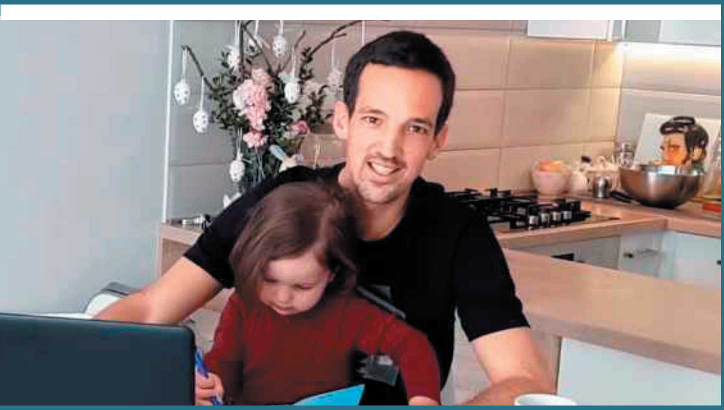
Giuseppe Di Martino
Owner of Pastificio Di Martino

ACCESSING CAPITAL MARKETS

UniCredit continued to help clients access capital markets including those of the Republic of Austria, the Free State of Bavaria, the German State of North Rhine Westphalia and the European Investment Bank. UniCredit also supported the Italian Ministry of Finance with record breaking BTP issuance to help the country fund it's pandemic response and was joint bookrunner on a €17 billion social bond for the EU.

STAYING ON TRACK WITH €600 MILLION

UniCredit supported Italy's state-owned railways operator - Ferrovie dello Stato - by raising €600 million of new funding. This included a €200 million ESG loan to fund new electric trains and upgrade on-board safety systems.



BEING THERE FOR FAMILIES

To ensure the bank understood individual and family needs stemming from the Covid-19 crisis and identify possible solutions, UniCredit formed a new Family Board. The 20 person team meets regularly and has made a series of recommendations, on flexibilities, psycho-physical wellbeing, homeschool/homework support.

NEW WAYS OF WORKING

In October, UniCredit and the UniCredit European Works Council signed a joint declaration on remote work. This will allow the Group to extend the opportunities offered by technological advancements and enable new ways of working to support a better work-life balance and greater efficiency.

for our Colleagues

Throughout 2020, we made decisions quickly to protect our colleagues. We distributed millions of items of PPE to our branches and offices, and with fast IT upgrades, we rolled out new laptops and remote access to around 80,000 UniCredit employees, allowing them to work safely and effectively.

SUPPORTING OUR BRANCH HEROES

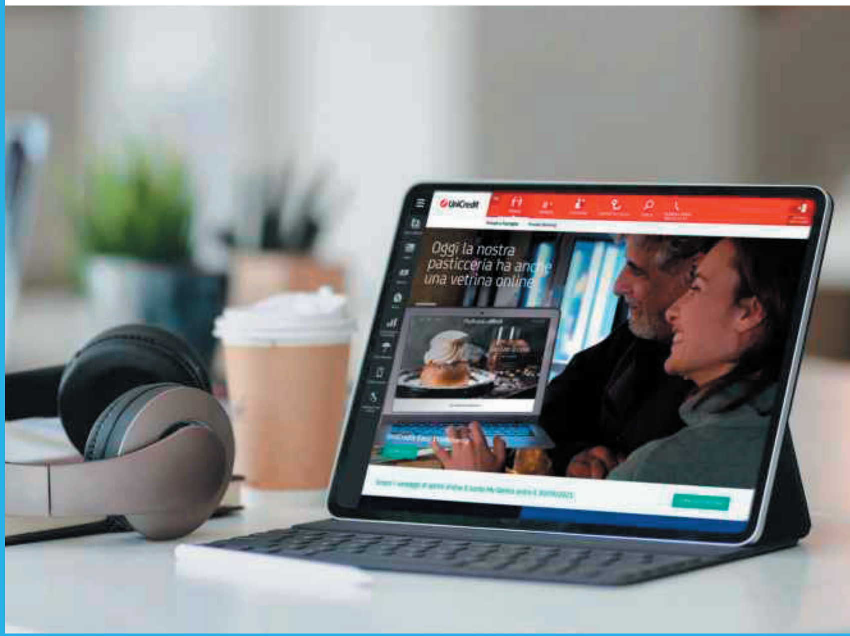
Thanks to our branch heroes, UniCredit remained open for business and continued to serve customers in all our countries, while keeping clients and our people safe. During the lockdown, UniCredit's CEO and other members of the Executive Management Committee made hundreds of video calls to branch colleagues across Italy, Austria, Germany and the CEE to recognise their extraordinary efforts.

TURNING IDEAS INTO ACTION

UniCredit's Millennial Board – comprised entirely of employees aged 22-32 – continued to implement some of the 1,200 ideas and suggestions made by their UniCredit colleagues. Successful initiatives in 2020 included starting planting more than 90,000 trees to establish the UniCredit Forest.

HELP FOR ENTREPRENEURS

The UniCredit Start Lab programme supports growth of 60 Italian innovative companies with its Startup Academy initiative, demonstrating the bank's willingness to support innovation and young entrepreneurs.



for the Real Economy

With over 16 million clients in 13 countries, we took decisive action to give families and businesses across Europe the support they need.

€34,8bn
MORATORIA LOANS

€20,8bn
STATE-GUARANTEED LOANS

GRANTING MORATORIA LOANS... QUICKLY!

As the pandemic hit Europe, pushing many countries into lockdown, we provided our clients with moratoria loans worth €34,8 billion and granted €20,8 billion of state guaranteed loans.
Given the circumstances, speed was important and 1,600 UniCredit employees worked over the weekend to process the first 100,000 applications.

Thanks to a partnership with SACE, the Italian credit export agency, UniCredit disbursed €2,5 bn to finance SMEs and mid-cap businesses with most processed in just a few hours. Similar partnerships with the European Investment Bank and the European Investment Fund provided working capital support and new financing to SMEs and mid-cap companies in Italy, Austria, Germany and nine CEE countries.

AWARDED 'WORLD'S BEST BANK FOR SMES'

In October, **Global Finance** magazine recognised UniCredit in its World's Best Global Banks Awards. Based on performance over the past year and criteria including reputation and management excellence, UniCredit was awarded 'Best Bank for SMEs.'

SUPPORTING SUPPLIERS

To help companies with their working capital needs and inject liquidity into the economy, UniCredit started to pay over 20,000 suppliers on 'sight' of the invoice rather that in accordance with contractual payment terms. The initiative has been continued in 2021.

20,000
SUPPLIERS SUPPORTED WITH FASTER PAYMENTS

GIVING A BOOST TO BUSINESS

In June, UniCredit launched the **Digital&Export Business School** in partnership with SACE and Microsoft with the aim of providing an integrated path, lasting 6 months, which was concretely supportive for Made in Italy entrepreneurship. The entire course was designed to be full digital, and has allowed more than 3,200 registered and over 2,700 participants to converse with about 50 UniCredit, Microsoft, Sace experts but also journalists, sociologists, researchers, through 8 inspiring national events and 26 local live Coaching on specific issues carried out with over 19 local associations.

HELPING CUSTOMERS SUPPORT COMMUNITIES

In 2020, over €2,600,000 in donations were funded by customers using UniCredit's Carta Etica payment card. UniCredit's Flexia Classic Etica credit card lets customers contribute to charitable projects at no added cost. For every €1,000 spent, UniCredit contributes €2 to the Carta Etica fund.

"The bank reacted quickly after the state of emergency was declared. We immediately applied to reschedule our debt, which helped us keep our company our staff, and preserve our partners.
I would like to express my gratitude."

Ivelin Bezhev
Manager, Santulita Limited
Customer of UniCredit Bulbank, Bulgaria

for the Environment

Our new sustainability targets, unveiled towards the end of 2019, were the focus of several sustainability-focused initiatives in 2020 and it was great to be recognised by a number of external organisations for our progress.

LEADING THE WAY ON GREEN FINANCE

As a leader in the sustainable finance sector, UniCredit participated to the placement of nearly €120 bn of sustainable bonds and loans in 97 deals. UniCredit was also recognised by Bloomberg as a leading provider of sustainability-linked loans. Moreover, with regard to green bonds, other major transactions included a €750 million bond for real estate firm CPI Property Group to fund new green projects, €750 million for Eurogrid to fund offshore wind farm projects and €500 million for Swisscom to finance energy efficiency projects.

A NEW GOAL FOR COAL

UniCredit's updated coal policy – which will see the bank fully exit coal sector financing by 2028 – was praised as best-in-class by Reclaim Finance, a non-profit organisation focused on reducing financing of fossil fuels by the world's largest financial institutions.

FUNDING THE FUTURE

Throughout 2020 we supported companies and projects that are supporting the transition to a lower carbon future. This included €700 million of new funding for a renewable energy portfolio, a €143 million funding package for one of Austria's largest wind farms and financing support to build Europe's largest battery factory.

#1*

RANKING ON BLOOMBERG SUSTAINABILITY LINKED LOANS

CAUSING A BUZZ AT OUR NEW AUSTRIAN HQ

It wasn't just employees that moved into UniCredit new Austrian headquarters. They were joined by over one million honeybees who will both pollinate nearby surroundings and make honey to be harvested by UniCredit employees. What a sweet result!

20,000

TONNES OF CO_2 OFFSET BY UNICREDIT FOREST OVER THE NEXT DECADE

* as at 3Q 2020

TAKING ACTION AT D&I WEEK 2020

More than 21,000 colleagues participated in 145 hours of workshops, coaching sessions and online discussions as part of UniCredit's second annual Diversity & Inclusion Week. With 100 events held in 15 markets, there was a chance for everyone to join in or listen to 270 external speakers.

for Diversity & Inclusion

UniCredit is committed to promoting a working environment that embraces our core values of Ethics and Respect.

GENDER-EQUALITY EFFORTS RECOGNISED BY BLOOMBERG

UniCredit was included in Bloomberg's 2020 Gender-Equality Index (GEI), which tracks the performance of public companies committed to disclosing their efforts to support gender equality through policy development, representation and transparency. The bank was included again in 2021, joining 380 companies across 44 countries and 11 sectors.

SUPPORTING FEMALE ENTREPRENEURS

In Italy, UniCredit unveiled a package of support for female entrepreneurs and companies that provide family-orientated services. The support includes discounted loans for entrepreneurs, social impact financing for companies providing welfare, health and educational services, and a dedicated mentoring programme.

A GREAT PLACE FOR WOMEN TO WORK

UniCredit was named Italy's 'Best Employer for Women' by **Istituto Tedesco Qualità e Finanza (ITQF)** – a leading European market research institution – and its media partner **La Repubblica Affari&Finanza**. ITQF uses big data to review a company's online reputation and sentiment amongst women at work, with UniCredit receiving the top score in the banking sector.

TAKING ACTION ON DISABILITY LEADERSHIP

UniCredit joined **The Valuable 500**, a movement that aims to put disability on the global business leadership agenda by attracting the support of 500 national and multinational corporation.

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Banking that matters.

HypoVereinsbank

Member of UniCredit