One Bank, One UniCredit.

2019

Half-yearly Financial Report at 30 June 2019

Banking that matters.

HypoVereinsbank

Member of UniCredit

Contents

Financial Highlights

Key performance indicators

	1/1–30/6/2019	1/1–30/6/2018
Net operating profit	€672m	€914m
Cost-income ratio (based on operating income)	69.6%	65.9%
Profit before tax	€973m	€602m
Consolidated profit	€603m	€262m
Earnings per share	€0.75	€0.33

Balance sheet figures/Key capital ratios

	30/6/2019	31/12/2018
Total assets	€294,552m	€286,688m
Shareholders' equity	€17,608m	€17,751m
Common Equity Tier 1 capital[1]	€16,271m	€16,454m
Core capital (Tier 1 capital)[1]	€16,271m	€16,454m
Risk-weighted assets (including equivalents for market risk and operational risk)	€83,899m	€82,592m
Common Equity Tier 1 capital ratio[1, 2]	19.4%	19.9%
Core capital ratio (Tier 1 ratio)[1, 2]	19.4%	19.9%
Leverage ratio in accordance with Commission Delegated Regulation[1, 3]	4.9%	4.9%

1 31 December 2018: 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.

	30/6/2019	31/12/2018
Employees (in FTEs)	12,205	12,252
Branch offices	500	503

Ratings

	LONG-TERM	SHORT-TERM	OUTLOOK		CHANGE/ CONFIRMATION
Fitch Ratings					
Bank Ratings					
Derivative Counterparty Rating	BBB+	—	—		3/12/2018
Deposit Rating	BBB+	F2	—		3/12/2018
Issuer Default Rating	BBB+	F2	negative		3/12/2018
Stand-alone Rating	—	—	—	bbb+	3/12/2018
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Preferred Debt Issuance Programme	BBB+	F2	—		3/12/2018
Non-preferred Senior Unsecured Debt/ Issuer Default Rating	BBB+	F2	negative		3/12/2018
Subordinated Debt	BBB	—	—		3/12/2018
Issue Ratings (secured)					
Public Sector Covered Bonds	AAA	—	stable		5/12/2018
Mortgage Covered Bonds	AAA	—	stable		1/2/2019
Moody's					
Bank Ratings					
Counterparty Rating	A1	P-1	—		19/6/2018
Deposit Rating	A2	P-1	stable		3/8/2018
Issuer Rating	A2	—	stable		3/8/2018
Stand-alone Rating	—	—	—	baa2	31/5/2017
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Unsecured	A2	P-1	stable		3/8/2018
Non-preferred Senior Unsecured Debt/ Junior Senior Unsecured	Baa3	—	—		3/8/2018
Subordinated debt	Baa3	—	—		31/5/2017
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	—		1/2/2019
Issuer Credit Rating	BBB+	A-2	negative		1/2/2019
Stand-alone Rating	—	—	—	bbb+	1/2/2019
Issue Ratings (unsecured)					
Preferred Senior Unsecured Debt/ Senior Unsecured	BBB+	A-2	negative		1/2/2019
Non-preferred Senior Unsecured Debt/ Senior Subordinated	BBB	—	—		1/2/2019
Subordinated Debt	BBB–	—	—		1/2/2019

Financial Review

Corporate structure

Legal corporate structure and organisation of management and control
In the first half of 2019, the legal corporate structure and the organisation of management and control remained unchanged compared with year-end 2018. Please refer to the respective sections in Management's Discussion and Analysis of the 2018 Annual Report for statements in this connection.

The following changes occurred on the Supervisory Board in the first half of the year:

Ms Beate Dura-Kempf resigned from the Supervisory Board of UniCredit Bank AG as an employee representative with effect from the end of 31 January 2019. For the remaining term of her office, Ms Claudia Richter was appointed to the Supervisory Board as an employee representative by Munich Local Court with effect from 8 February 2019.

Mr Gianni Franco Papa resigned from the Supervisory Board as a shareholder representative with effect from the end of 2 June 2019. He was succeeded by Mr Gianpaolo Alessandro as a shareholder representative on the Supervisory Board by a resolution of the Annual General Meeting of Shareholders on 3 June 2019. Mr Alessandro was also elected as the Chairman of the Supervisory Board by a resolution of the Supervisory Board.

A list showing the names of all of the members of the Management Board and the Supervisory Board of UniCredit Bank AG (HVB) is provided in the notes to the consolidated financial statements under "Members of the Supervisory Board" and "Members of the Management Board" in this Half-yearly Financial Report.

Transform 2019
The persistently challenging environment for the banking industry and thus the huge downward pressure on profitability and revenues require adjustments to bank structures and processes. To ensure the successful advancement of the Bank, we set up the Multi-Year Plan 2017–2019. Our strategic planning is embedded in the group-wide Transform 2019 programme, which comprises initiatives on the income, costs and cooperation side. Within the framework of the programme, we are optimising our internal structures and processes (also through end-to-end optimisation and the streamlining of processes). This includes a transfer of activities between different locations and the centralisation of tasks as a restructuring measure and will extend into 2019 in parallel to a further adjustment of our staffing levels. At the same time, intensified cooperation between the business segments will create greater cross-selling potential and the use of the respective product expertise will leverage additional synergies and earnings potential. The implementation of the programme is proceeding according to schedule.

Corporate acquisitions and sales, and other major changes in the group of companies included in consolidation
In January 2019, we reached an agreement on the sale of the associated company SwanCap Partners GmbH accounted for using the equity method, which was completed in the second quarter of 2019.

Other changes in the group of companies included in consolidation are listed in the Note "Companies included in consolidation" in the notes to the consolidated financial statements.

Economic report

Underlying economic conditions

Economic growth[1]	First half 2019[2]	Full year 2018	Main drivers of development in the first half of 2019
Global economy[3]	3.1%	3.6%	Global economic growth slowed again in the first half of the year. The eurozone and China provided weaker stimuli.
Eurozone countries	1.1%	1.9%	In the eurozone, the GDP grew at a slower pace on account of lower performance figures from Germany and Italy with weaker global trade acting as a damper.
including: Germany	0.5%	1.4%	The weak growth in Germany in the first half of the year is attributable to a marked decline in the export-oriented manufacturing industry, especially in the automotive sector. By contrast, the construction sector and private consumer spending made a significant contribution to growth.
USA	2.9%	2.9%	The consistently strong growth was again partly due to private consumption, which has been supported by the very favourable labour market to date. There was also a sharp rise in corporate investments.

1 Change in real GDP (in % compared with the previous year).
2 Sources: national authorities, UniCredit research forecasts.
3 Source: full year value expected by UniCredit Research (figures for first half of 2019 are not available).

Sector-specific developments

The greatest global growth risks are an increase in trade tensions, including the imposition of tariffs by the USA and China on each other's imports, and the much-discussed US tariffs on imports from other regions. Other negative factors for the global economy are the weaker growth in China and a dimming of growth prospects for Europe. The ongoing Brexit negotiations added additional uncertainty to the markets. In April, the European Council granted a Brexit extension until 31 October 2019.

In the European elections at the end of May, pro-EU parties received a clear majority in the European Parliamentary elections, but the Parliament is more fragmented than five years ago as the traditional centre-right and centre-left groups lost seats to the Liberals and the Greens. The elections did not lead to the deterioration in market sentiment expected by some market observers.

Financial Review (Continued)

Risk premiums for government bonds rose sharply in Italy in May. In Italy, the strong showing of the Lega and the large losses of the Five-Star Movement led to tensions between the coalition partners. At the same time, in a letter to the Italian finance minister, the EU Commission warned that Italy was running the risk of not complying with EU fiscal policy rules. After intensive negotiations between Brussels and Italy, Brussels declared at the beginning of July that it would not initiate an excessive deficit procedure, which clearly brightened the mood. However, risk premiums for government bonds narrowed sharply again in June and July and the spread between the ten-year Italian and German government bonds narrowed by 100 basis points compared with 287 basis points at the end of May.

The increasing macroeconomic and political uncertainty and the changed interest rate expectations caused gloomy sentiment for bank shares. While the Euro STOXX 50 gained 16% in the first half of 2019, the STOXX Europe 600 Banks remained virtually unchanged over the same period.

In the USA, the yield on ten-year US government bonds fell significantly from over 3.2% in 2018 down to 2.0% at the end of June 2019. The yield on the ten-year bonds of the Federal Republic of Germany also fell significantly in the first half of 2019 down to 40 negative basis points, the lowest level in history. The declining level is attributable to increasing political uncertainty and an expected interest rate cut by the Federal Reserve Bank (FED) and the European Central Bank (ECB).

In the first half of 2019, 3-month Euribor initially remained unchanged within a bandwidth of 31–33 negative basis points, but then fell to 36 negative basis points in July. Risk premiums on bonds fell in the first half of 2019. Credit spreads for non-financials with good credit ratings fell by 33 basis points and senior bonds of banks by 26 basis points. This development partly reflected the higher risk appetite of investors.

The euro remained virtually unchanged against the US dollar in the first half of 2019, while it depreciated slightly against the Swiss franc and the Japanese yen. The euro initially depreciated against the British pound, then rose again in May and June and remained unchanged throughout the first half of 2019.

In the Italian banking sector, the reduction in the still relatively large stock of impaired loans by European standards continued. The portion of impaired loans fell from 16.8% at the end of 2015 to 8.3% at 31 March 2019 and in the same period, the risk coverage rose from 45% to 53%. Impaired loans were also further reduced in other countries such as Spain, Ireland and Portugal which resulted in a reduction of risks in the European banking sector overall. In the aggregate, the portfolio of loans at risk of default fell from almost €1,000 billion at the beginning of 2017 to €688 billion, a reduction of more than €300 billion.

Operating performance of HVB Group

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

INCOME/EXPENSES	1/1–30/6/2019 € millions	1/1–30/6/2018 € millions	CHANGE € millions	in %
Net interest	1,149	1,244	(95)	(7.6)
Dividends and other income from equity investments	2	9	(7)	(77.8)
Net fees and commissions	488	543	(55)	(10.1)
Net trading income	338	378	(40)	(10.6)
Net gains/(losses) on financial assets and liabilities at fair value	2	(39)	+ 41	
Net gains/(losses) on derecognition of financial instruments measured at cost	5	17	(12)	(70.6)
Net other expenses/income	491	231	+ 260	>+ 100.0
OPERATING INCOME	**2,475**	**2,383**	**+ 92**	**+ 3.9**
Payroll costs	(723)	(735)	+ 12	(1.6)
Other administrative expenses	(617)	(722)	+ 105	(14.5)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(383)	(113)	(270)	>+ 100.0
Operating costs	**(1,723)**	**(1,570)**	**(153)**	**+ 9.7**
OPERATING PROFIT	**752**	**813**	**(61)**	**(7.5)**
Credit impairment losses IFRS 9	(80)	101	(181)	
NET OPERATING PROFIT	**672**	**914**	**(242)**	**(26.5)**
Provisions for risks and charges	288	(339)	+ 627	
Restructuring costs	—	(1)	+ 1	(100.0)
Net gains/(losses) on disposals of investments	13	28	(15)	(53.6)
PROFIT BEFORE TAX AND IMPAIRMENT ON GOODWILL	**973**	**602**	**+ 371**	**+ 61.6**
Impairment on goodwill	—	—	—	—
PROFIT BEFORE TAX	**973**	**602**	**+ 371**	**+ 61.6**
Income tax for the period	(370)	(340)	(30)	+ 8.8
PROFIT AFTER TAX	**603**	**262**	**+ 341**	**>+ 100.0**
CONSOLIDATED PROFIT	**603**	**262**	**+ 341**	**>+ 100.0**
attributable to the shareholder of UniCredit Bank AG	602	261	+ 341	>+ 100.0
attributable to minorities	1	1	—	—

Financial Review (Continued)

Net interest
At €1,149 million, net interest in the persistently challenging environment in the first half of 2019 was lower than the previous-year figure (€1,244 million). It should be noted in this context that due to a change in the reporting method, the difference between spot and forward rates of forward exchange transactions for certain transactions is no longer shown under net trading income but under net interest. These changes amount to a net loss of €41 million in the first half of 2019, which are now weighing on net interest. In the previous year, these effects were still reported under net trading income.

In the Commercial Banking business segment, there was a slight 0.5% increase in net interest to €732 million despite the still very low level of interest rates compared with the previous year. In the CIB business segment, net interest declined by a significant 22.7% to €401 million, reflecting a decline in trading-induced interest. In the Group Corporate Centre business segment, net interest increased sharply by €19 million to €32 million. In the Other business segment, net interest remained almost unchanged from the previous year at minus €3 million. Within the scope of Consolidation, net interest was also almost unchanged from the previous year at minus €13 million.

Dividends and other income from equity investments
Dividends and other income from equity investments came to €2 million during the reporting period. Income of €9 million from dividends and other income from equity investments was generated in the previous year.

Net fees and commissions
In the first half of 2019, net fees and commissions fell by €55 million, or 10.1%, to €488 million. It should be noted in this context that the recognition of certain payment transaction services received from third parties amounting to €20.7 million is shown as a commission expense in this item, while this expense was recognised under operating costs in the previous year. The previous-year figures were not restated for reasons of materiality. Commission income from investment services for customers was also down, posting a decline of €40 million to €276 million. In addition, net fees and commissions from the lending business declined by €7 million to €78 million and other commission income by €6 million to €26 million. By contrast, income from the sale of third-party products increased by €14 million to €54 million.

Net trading income
This item fell by €40 million to €338 million. The change in the reporting method described under net interest, which results in a net loss of €41 million no longer being reflected under net trading income as of the first half of 2019, must be taken into account in this connection.

Net gains/losses on financial assets and liabilities at fair value
This item reported a gain of €2 million. In the previous year, this item posted a loss of €39 million.

Net gains/losses on derecognition of financial instruments measured at cost
This item reports a gain of €5 million, declining by €12 million year on year.

Net other expenses/income

Net other expenses/income amounts to €491 million and is thus €260 million higher than the previous-year figure of €231 million. The figure reported for the first half of 2019 contains income of €365 million from the sale of properties reported in the balance-sheet item "Non-current assets or disposal groups held for sale" which are held by our companies Acis Immobilien und Projektentwicklungs GmbH & Co. Oberbaum City KG and NF Objekte Berlin GmbH.

Operating costs

Compared with the previous-year period, operating costs rose by €153 million, or 9.7%, to €1,723 million. This is mainly due to extraordinary write-downs of €259 million on the offshore wind farm, which was classified as IFRS 5.

Operating profit (before credit impairment losses IFRS 9)

The operating profit of HVB Group fell by a significant €61 million, or 7.5%, to €752 million in the reporting period. The slight increase of €92 million, or 3.9%, to €2,475 million in operating income was unable to offset the rise of €153 million, or 9.7%, to €1,723 million in operating costs. The cost-income ratio increased from 65.9% in the previous-year period to 69.6% in the first half of 2019. Excluding the non-recurring effects, a slight decline is reported in operating income compared with the previous-year period while operating costs fell as expected.

Credit impairment losses IFRS 9

The increase in credit impairment losses to minus €80 million compared with the first half of 2018, which reported a positive balance of €101 million, shows the beginning of the expected normalisation of this variable. In absolute terms, it continues to reflect the positive economic development in Germany in recent years.

Provisions for risks and charges

In the first half of 2019, there was net income from the reversal of provisions for risks and charges of €288 million after net additions of €339 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 are lower than the provisions set up for it, which means that it was possible to reverse the excess. The net additions to provisions for risks and charges in the first half of 2018 were largely due to the increase in provisions for this matter.

Net gains/losses on disposals of investments

This item reports a gain of €13 million, which is largely attributable to the sale of SwanCap Partners GmbH, an associated company accounted for using the equity method.

Profit before tax and impairment on goodwill

In the first half of 2019, HVB Group generated a very good profit before tax and impairment on goodwill of €973 million, which was €371 million or 61.6% up on the previous-year period, in the persistently challenging market environment. However, the non-recurring effects described should also be taken into account in this context.

Financial Review (Continued)

Impairment on goodwill
There is no impairment on goodwill in the first half of 2019.

Profit before tax, income tax for the period and consolidated profit
In the first half of 2019, HVB Group generated a very good profit before tax of €973 million.

Income tax expense amounted to €370 million in the reporting period and was thus €30 million higher than the income tax expense in the previous-year period (€340 million).

After deducting income tax, HVB Group generated a consolidated profit of €603 million in the reporting period, which is significantly higher than the consolidated profit of the first half of 2018 (€262 million).

Return on allocated capital
The profitability ratio return on allocated capital (RoAC) shows the consolidated profit of HVB Group (accruing 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). In the process, 12.5% equity is allocated to the average risk-weighted assets. In the first half of the year, this ratio improved to 11.5% after 5.6% in the first half of 2018.

Segment results by business segment
The Other business segment is reported separately from consolidation items for the first time. The previous-year figures have been restated accordingly. 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 "Segment reporting". After the first six months of 2019, all the business segments generated a profit before tax or consolidated profit:

(€ millions)

OPERATING INCOME	1/1–30/6/2019	1/1–30/6/2018
Commercial Banking	1,088	1,154
Corporate & Investment Banking	892	1,021
Group Corporate Centre	66	67
Other	36	35
Consolidation	(11)	(13)
Total	**2,071**	**2,264**

(€ millions)

PROFIT BEFORE TAX/(LOSS)	1/1–30/6/2019	1/1–30/6/2018
Commercial Banking	336	125
Corporate & Investment Banking	174	323
Group Corporate Centre	437	156
Other	28	26
Consolidation	(2)	(28)
Total	**973**	**602**

(€ millions)

CONSOLIDATED PROFIT	1/1–30/6/2019	1/1–30/6/2018
Commercial Banking	201	33
Corporate & Investment Banking	57	113
Group Corporate Centre	323	120
Other	23	16
Consolidation	(1)	(20)
Total	**603**	**262**

The income statements for each business segment and comments on the economic performance of the individual business segments are provided in the Note "Income statement, broken down by business segment" in the notes to this Half-yearly Financial Report. The tasks of each business segment are described in detail under the Note "Method of segment reporting by business segment" and under the Note "Components of segment reporting by business segment" in the notes to the 2018 consolidated financial statements.

Financial situation

Total assets

The total assets of HVB Group increased by €7.9 billion, or 2.7%, to €294.6 billion at 30 June 2019 compared with year-end 2018.

On the assets side, cash and cash balances fell by €2.3 billion to €17.6 billion, which is exclusively due to the decline in balances with central banks. Financial assets held for trading rose by €4.8 billion to €73.7 billion, mainly on account of higher positive fair values (up €7.1 billion). Fixed-income securities (down €1.6 billion) and other financial assets held for trading (down €0.6 billion) declined while equity instruments remained almost unchanged. The portfolio of financial assets at FVTPL fell by €1.0 billion from €16.7 billion at year-end 2018 to €15.7 billion as a result of maturing securities that were not reinvested. By contrast, financial assets at FVTOCI rose to €8.5 billion compared with the closing level of €7.4 billion at 31 December 2018. Loans and receivables with banks declined by a slight €0.4 billion to €33.3 billion, which is mainly attributable to the decline in reverse repo volumes (down €1.2 billion) and other receivables (down €0.4 billion) whereas cash collateral and pledged credit balances increased (up €1.7 billion). Loans and receivables with customers rose €5.5 billion to €139.2 billion. This rise is due to larger volumes of mortgage loans (up €1.4 billion), securities (up €1.0 billion) and other loans to banks (up €3.3 billion). By contrast, reverse repos fell to €2.6 billion (down €1.2 billion). The item "Non-current assets or disposal groups held for sale" increased by a net amount of €1.1 billion to €1.9 billion while property, plant and equipment declined by €1.1 billion.

On the liabilities side, the deposits from banks were up by €3.5 billion to €66.4 billion. There was a rise of €2.7 billion to €19.6 billion in deposits from central banks compared with the 2018 closing balance sheet and of €0.9 billion to €17.4 billion in repos. By contrast, term deposits fell by €0.6 billion to €4.2 billion. Deposits from customers were also down by €1.2 billion to €119.8 billion. This decrease is primarily due to a decline of €3.6 billion to €2.6 billion in repos. On the other hand, there were increases of €1.0 billion to €19.1 billion in term deposits and €1.8 billion to €5.7 billion in cash collateral and pledged credit balances. Debt securities in issue were up by €2.2 billion to €26.6 billion compared with year-end 2018. Financial liabilities held for trading rose by €2.8 billion to €50.9 billion compared with year-end 2018.

The shareholders' equity shown in the balance sheet decreased slightly by around €0.1 billion to €17.6 billion at the balance sheet date of 30 June 2019. The 2018 consolidated profit (up €520 million) is no longer included in the shareholders' equity as it was paid as a dividend to UniCredit S.p.A., Milan, Italy, as resolved by the Shareholders' Meeting in the second quarter of 2019. Besides this, other comprehensive income, at minus €0.2 billion in the first half, weighed down shareholders' equity. The consolidated profit generated (up €0.6 billion) was unable to offset this decline in the first half of 2019.

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 Half-yearly Financial Report 2019.

Financial Review (Continued)

Contingent liabilities and other commitments not recognised in the balance sheet amounted to €77.6 billion at 30 June 2019 compared with €75.6 billion at the end of the previous year. This figure includes contingent liabilities in the form of financial guarantees of €23.9 billion (31 December 2018: €26.2 billion) and other commitments of €53.7 billion (31 December 2018: €49.4 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 Basel III requirements amounted to €83.9 billion at 30 June 2019 and were thus €1.3 billion higher than year-end 2018.

The risk-weighted assets for credit risk (including counterparty default risk) determined by applying partial use rose by €2.3 billion to €66.5 billion. This increase is principally due to higher exposure values at HVB, both in counterparty risk and in the conventional lending business.

The risk-weighted assets for market risk fell by €0.7 billion to €8.5 billion. This is primarily attributable to a decline in market risk, which is measured using HVB's internal market risk model.

The risk-weighted asset equivalents for operational risk fell by €8.9 billion at 30 June 2019 and thus decreased by €0.3 billion compared with year-end 2018. The decline is mainly attributable to a change in the Advanced Measurement Approach (AMA) model at 30 June 2019, which also contains a margin of conservatism.

At 30 June 2019, Common Equity Tier 1 capital compliant with Basel III excluding hybrid capital (CET1 capital) and Tier 1 capital of HVB Group amounted to €16.3 billion and thus fell compared with year-end 2018 (31 December 2018: €16.5 billion in accordance with approved consolidated financial statements). The CET1 capital ratio (ratio of Common Equity Tier 1 capital to the total amount of credit risk-weighted assets and risk-weighted asset equivalents for market risk and operational risk) and the Tier 1 capital ratio under Basel III (including market risk and operational risk) amounted to 19.4% at 30 June 2019 (31 December 2018: 19.9% in both cases). The decline is attributable to the decrease in Common Equity Tier 1 capital and an increase in risk-weighted assets. Own funds came to €16.8 billion at 30 June 2019 (31 December 2018: €17.0 billion in accordance with approved consolidated financial statements). The own funds ratio was 20.0% at 30 June 2019 (31 December 2018: 20.6%).

The leverage ratio is determined by setting the Tier 1 capital measure against the total exposure measure. The total exposure measure is the sum total of the exposure values of all assets and off-balance sheet items. The leverage ratio of HVB Group amounted to 4.9% at 30 June 2019 (31 December 2018: 4.9%).

Ratings

The ratings of countries and banks are subject to constant monitoring by rating agencies. In the course of harmonising the liability cascade of bank liabilities within the EU, the provisions of Section 46f KWG were amended by the German legislator on 21 July 2018 and thus the insolvency ranking of bank liabilities of German banks was revised, in particular with regard to senior unsecured bonds.

Moody’s responded to this legislative amendment by adjusting the rating of certain senior debt instruments of German banks on 3 August 2018. Moody’s introduced junior senior bank debt as a class of instruments for senior non-preferred (SNP) debt instruments (contractual subordination). In addition, the senior unsecured debt instruments with legal subordination issued up to 20 July 2018, which had previously been reported under the issuer credit rating, were assigned to the new instrument class, as these debt instruments are equal in rank to SNPs. There was no premium on junior senior bank bonds resulting from possible government support as in the opinion of Moody’s, there is little likelihood of this class of instruments receiving government support. The junior senior unsecured instruments of UniCredit Bank AG were assigned a rating of Baa3. The portfolio of complex structured senior bonds outstanding at 20 July 2018, which to date had been grouped under the “senior senior debt” category, was assigned to the new “senior unsecured bank debt” class of instruments. The senior unsecured rating of UniCredit Bank AG was affirmed at A2. The rating category of senior unsecured bank debt instruments was defined as a point of reference for the issuer credit rating. As a result, the issuer credit rating of UniCredit Bank AG increased from Baa2 to A2. The deposit rating of UniCredit Bank AG was affirmed at A2/stable/P-1 while the counterparty risk rating (CRR) remained unchanged at A1/P-1 and the stand-alone rating at Baa2.

Fitch responded to the amendment of Section 46f KWG by introducing an issue rating for senior preferred instruments, which under certain circumstances allows a higher rating than the issuer default rating. The main criterion for this is, in Fitch's view, a sufficient risk buffer through subordinated instruments (senior non-preferred debt and subordinated debt). However, Fitch presently sees a certain degree of uncertainty about the specific effects of UniCredit’s resolution strategy on UniCredit Bank AG so that the issue rating of the senior preferred instruments of UniCredit Bank AG was set at currently BBB+/F2, the same level as the issuer default rating (IDR). The deposit rating of UniCredit Bank AG stands at BBB+/F2, the derivative counterparty rating at BBB+. The outlook for the IDR remains negative as Fitch believes the fungibility of capital and liquidity could increase within banking groups under the direct supervision of the ECB. The ratings and outlook of UniCredit Bank AG were affirmed by Fitch on 3 December 2018 in the course of a regular rating review.

As part of the specification of the liability cascade, S&P already introduced the senior subordinated debt instrument rating in March 2017, which is usually one level below the issuer credit rating (ICR). The senior subordinated debt rating of UniCredit Bank AG is BBB. In June 2018, S&P introduced the resolution counterparty rating (RCR). S&P set its first rating for the RCR of UniCredit Bank AG at A-/A-2 and thus a notch higher than the long-term issuer credit rating.

Following the S&P rating decisions for Italy and for UniCredit S.p.A. in October 2018, for which the rating outlook was set to negative in both cases, the outlook of UniCredit Bank AG was then also adjusted from developing to negative in November 2018, while the ICR of UniCredit Bank AG was affirmed at BBB+/A-2 by S&P. The negative outlook for the ICR indicates that the rating may deteriorate if UniCredit S.p.A. is downgraded and at the same time reflects the uncertainties regarding the timely implementation of UniCredit’s resolution strategy and its effects on UniCredit Bank AG.

The ratings and the outlook of UniCredit Bank AG were affirmed on 1 February 2019 in the course of a regular rating review by S&P Global Ratings.

Financial Review (Continued)

Report on subsequent events (events after the reporting period)

At the beginning of August, HVB agreed on the sale of the companies Ocean Breeze Energy GmbH & Co. KG (and the subsidiaries held by this company) and Perikles 20092 Vermögensverwaltung GmbH. The assets and liabilities of the companies will be recognised in the items "Non-current assets or disposal groups held for sale" or "Liabilities of disposal groups held for sale".

Forecast report/Outlook

The following comments on the outlook are to be viewed in connection with those in the Financial Review and the Risk Report in Management's Discussion and Analysis of the 2018 Annual Report.

General economic outlook
Growth in the global economy is likely to weaken further in 2019. After an increase of 3.6% in global output in 2018, we expect this to fall to 3.1% in 2019. It would be the weakest growth since the global financial crisis around 10 years ago. Besides a decline in economic momentum in the USA, growth is also likely to contract in the eurozone. Another negative factor for the global economy is likely to be the somewhat weaker growth in China, triggered in particular by trade tensions with the USA and the ongoing transformation of the Chinese economy. However, the Chinese monetary and fiscal policy stimulus measures introduced at the end of 2018 should help to stabilise growth.

In our baseline scenario, we assume that the trade talks between the USA and China will resume as agreed and result in the conclusion of a trade agreement in the medium to longer term. Although the resumption of trade talks will reduce political and economic tensions at global level, considerable uncertainty remains. The forecast risks for global economic growth therefore point downwards. Despite the extension of the United Kingdom's EU membership until the end of October, considerable uncertainties remain with regard to future developments. In the eurozone, the budget negotiations between Italy and the EU Commission in autumn 2019 might weigh down on the markets and poorer financing conditions might hinder economic growth. Recently, however, there were signs of an easing of this situation after Italy reduced its planned fiscal deficit for 2019 and the European Commission decided not to initiate an excessive deficit procedure.

The predicted slowdown in the US economy will make a noticeable contribution to weaker global growth in 2019. On account of expiring fiscal measures in 2019, we expect real GDP growth in the USA to come to 2.4%, thus 0.5 percentage points lower year on year. In this context, fiscal stimulus is expected to probably begin expiring in the second half of 2019. Yet other factors may also adversely affect US growth in 2019: Firstly, the labour market is likely to lose momentum as the labour supply will increasingly lead to a bottleneck. With an unemployment rate of less than 4%, the increase in the working population will no longer suffice to ensure continued high employment growth in the long term. As a result, we expect monthly salary increases to slow down in 2019. Combined with the diminishing impact of tax cuts, this is projected to lead to a perceptible decrease in the income gains available. Secondly, we anticipate a less favourable external environment, characterised by a slower pace in global economic growth coupled with uncertainty about additional tariffs on Chinese imports. The US Federal Reserve is likely to cut its key interest rate to 1.75% by the end of 2019 from its current level of 2.50%. However, the slowdown in the US economy will only be somewhat dampened as a result.

In 2019, we project lower growth of 1.0% in the eurozone and thus anticipate a noticeable decline compared with the previous year (up 1.9%). The economy in the eurozone is likely to be hit particularly by the decline in growth in the USA and weaker global trade in the second half of 2019. By contrast, domestic demand will probably be an important mainstay of economic activities again in 2019. Despite the economic slowdown, employment growth has so far proved to be robust. However, early indicators such as surveys among companies and the number of job vacancies indicate a noticeable slowdown. In addition, consumer confidence has passed its peak, indicating less dynamic private consumption. From an accounting perspective, the budgets are in good shape as the debt burden is still low in most countries despite strong growth in consumer loans. There is a backlog in investments, particularly in the construction sector. Risks for our forecasts arise particularly from political uncertainties such as a tightening of protectionist measures of the US administration and corresponding countermeasures by trading partners, a disorderly Brexit and a renewed escalation of the budget negotiations between Italy and Brussels.

Following the ECB's announcement of its TLTRO III programme in March, which will start in September 2019, further expansionary measures are likely. We expect the deposit facility rate to be reduced by a further 10 basis points to -0.5% after the summer break. This should be combined with a graduation in the deposit facility rate in order to dampen possible negative effects of a further interest rate cut on banks. Further monetary easing, presumably in the form of additional bond purchases, could follow by year-end 2019. We expect consumer price inflation in the eurozone to fall to 1.4% for the full year 2019 after 1.8% in 2018.

At country level, we forecast a GDP growth rate in Germany of only 0.6% (not calendar-adjusted) in 2019 compared with the previous year (2018: up 1.4%). In France, growth of 1.3% is projected to be slightly lower in 2019 than in 2018 (up 1.7%). For Italy, we expect the economy to stagnate this year after growing by 0.7% in 2018. In Spain, the economic recovery is also likely to weaken further from 2.6% in 2018 to an estimated 2.1% in 2019. For the United Kingdom, we expect almost unchanged growth of 1.3% in 2019 (last year: up 1.4%).

The key driver of German economic growth in 2019 is likely to be domestic consumption, while foreign trade will probably have a dampening effect due to the global slowdown in the second half of the year. Moreover, manufacturing companies in particular might suffer from a further escalation of the trade disputes in the USA-China-Europe triad. The decision on US tariffs for European cars was postponed to October. In the wake of weaker global growth and the associated lower growth rate in exports, investments in Germany are expected to be less dynamic in the course of the year.

By contrast, private consumption should record solid growth on the back of a still historically low unemployment rate coupled with sustained wage increases. However, the German labour market is showing signs of a slowdown in employment growth and a gradual rise in unemployment rates in the medium term. Further positive stimuli are likely to come from fiscal policy measures and an expansion of government consumption. But the construction industry in particular will probably once again make a significant contribution to overall economic growth in 2019.

Financial Review (Continued)

Banking sector development in 2019

The ECB discontinued its monthly net purchases of bonds at the beginning of 2019. As at May 2019, the ECB had purchased €2.6 trillion in assets and will continue to reinvest the maturing assets. The ECB thus remains a key factor influencing spread developments. The ECB has also repeatedly adjusted its interest rate outlook. When discontinuing its net purchases, it initially promised an interest rate hike but not before the second half of 2019, which was then postponed to not before 2020 and then to not before the second half of 2020. At the same time, a further interest rate cut and a reactivation of the net purchase programme were announced at the ECB meeting in July. The US Federal Reserve will very probably lower interest rates again, albeit from a significantly higher level than in the eurozone. The profit expectations of banks have been negatively affected by the changed market expectations in terms of monetary policy, although the ECB has promised measures to compensate for possible negative effects of a further interest rate cut on banks, on the one hand, due to lower interest rate levels and a flatter yield curve and on the other hand, due to slower growth dynamics.

As a further measure, the ECB has announced a third series of targeted long-term refinancing operations (TLTRO III). New drawdowns are possible from September 2019 for seven quarters until March 2021, for a term of two years in each case without an early repayment option. The interest rates for TLTRO III are within the range of main refinancing operations plus 10 basis points and the interest rate on the deposit facility plus 10 basis points, with the final interest rate, as in the previous programmes, depending on the development of new loans to companies and households excluding real estate loans.

Following the harmonisation of creditor hierarchies in the EU at the end of 2018, the EU banking package was published in June 2019. The package includes changes to capital requirements (CRR II and CRD V) and to the restructuring and resolution of distressed banks (BRRD II). With the CRR II Regulation and the CRD V Directive, the banking package transposes key elements of the Basel III framework into European law. In addition, the EU banking package complements the resolution regime in the EU:

1. The banking package transposes into European law the Total Loss-Absorbing Capacity (TLAC) Standard developed by the Financial Stability Board (FSB) for globally systemically important banks;
2. The Minimum Requirements for Own Funds and Eligible Liabilities (MREL) for banks in the EU were revised. The new stricter regulations increase the liabilities available in the event of resolution and thus increase the resolution capacity of banks. In the primary market, banks have increasingly issued TLAC and MREL-eligible, non-preferred senior bonds and this trend should continue. Furthermore, the capital requirements are likely to be expanded to include the leverage ratio.

In addition, the final Basel III reform package was adopted at the end of 2017. The new regulations relate mainly to the calculation of credit and operational risk and the respective capital backing of banks. The introduction of a minimum level of own funds (referred to as an output floor) for banks, which restricts the scope of banks in calculating their need for own funds with their own risk quantification methods, represents a significant change. The output floor will be implemented in stages between 2022 and 2027. Although no major increase in capital requirements is expected for the global banking sector as a whole, the Basel III regulations are likely to result in higher capital requirements for individual financial institutions. These institutions are required to gradually bolster their capital cover by 2027.

Further regulatory issues are the Targeted Review of Internal Models by the ECB (TRIM) and stricter regulatory expectations on the part of the ECB regarding loan loss provisions for new non-performing loans and receivables. There is also political agreement on a greater role to be played by the European Stability Mechanism (ESM). However, no major progress was made on the political side in the area of the European deposit insurance scheme (EDIS), although also the European Banking Authority (EBA) established that risks have been reduced in the European banking sector.

Development of HVB Group

Our forecasts on the development of the Group are based on a stable macro-political environment. Exogenous factors influencing our business performance are still difficult to assess at present, such as the continuing threat of a hard Brexit or the possible imposition of US tariffs on imports from Germany. Therefore, our forecasts are always associated with a degree of uncertainty.

Operating income developed positively in the first half of 2019 which, however, is partly due to non-recurring effects. We expect this income for the whole of the year to be slightly below the previous year's level. Possible non-recurring effects are not taken into account in this context. As forecast, the reduction in administrative expenses will continue if non-recurring effects are excluded. We expect this reduction to continue in the second half of the year.

Overall, we expect to be able to achieve a good profit before tax and amortisation of goodwill for the 2019 financial year in an environment that is still challenging for the financial sector. We expect profit after tax to be significantly higher compared with the previous year which, however, was heavily impacted by negative non-recurring effects.

Impairment losses increased in line with our forecasts of normalisation. In absolute terms, this continues to reflect the positive economic development of recent years in Germany.

As a whole, we assume for the 2019 financial year that the business segments will generate a good profit after tax which is higher than the result in the previous year. All the business segments will thus contribute to the overall result of HVB Group. Particularly in the Commercial Banking and CIB business segments, we project an improvement in the results due to the absence of the charges in the previous year. In the GCC business segment, the results are also expected to increase for the year as a whole.

For the 2019 financial year, we continue to expect an unchanged excellent capital base. The CET1 ratio will probably fall moderately below the level of the previous year as we project an increase in risk-weighted assets, particularly due to the planned expansion in the lending volume.

The opportunities in terms of future business policy and corporate strategy, performance and other opportunities were described in detail in the 2018 consolidated financial statements of HVB Group under Management's Discussion and Analysis (2018 Annual Report, page 26 ff.). The statements made in that report continue to apply.

We would expressly like to thank our employees at this point. Their willingness to embrace change and at the same time to help secure our commercial success forms the basis for our good performance. We also wish to thank the employee representatives for their constructive cooperation in spite of the very difficult issues. This gives all of us the confidence we need to master the challenges of the future.

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 were presented separately in the section of the Financial Review of the 2018 Annual Report in the Management´s Discussion and Analysis 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

"Other" is shown as an individual business segment separate from consolidation effects for the first time in the first half of 2019. The previous-year figures have been adjusted accordingly. In the past, the two segments were presented together as the "Other/consolidation" business segment. The relevant presentations have been carried out in the notes to the consolidated financial statements in segment reporting.

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 the default by the contracting party, meaning it is no longer in a position to meet its contractual obligations.

Market risk is defined as the potential loss of on- and off-balance-sheet positions in the trading and banking books that can arise in response to adverse changes in market prices (interest rates, equities, credit spreads, foreign exchange and commodities), other price-influencing parameters (volatilities, correlations) or trading-related events in the form of default or change in credit ratings of securities (specific price risk for net interest positions).

Liquidity risk is understood to be the danger that the Bank is not 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 supervisory actions, as well as settlements to private persons.

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 are presented in an abridged form.

The following risk types are summarised as other risks:
- **Real estate risk** covers potential losses resulting from changes in the fair value of the real estate portfolio of HVB Group. Besides the real estate owned by HVB, the HVB Group portfolio also includes the real estate owned by the real estate holding companies, the subsidiaries (group of companies included in consolidation according to IFRS) and special purpose vehicles (SPVs). No land or properties are included that are held as collateral in lending transactions.
- **Business risk** is defined as losses from unexpected negative changes in the business volume and/or margins that are not attributed to other risk types. It can lead to long-term losses in earnings, thereby diminishing the fair value of the company. Business risk can result above all from a serious deterioration in the market environment, changes in the competitive situation or customer behaviour, changes in the cost structure, and changes in the underlying legal conditions.
- **Pension risk** can occur both on the assets side and the liabilities side (pension commitments). This may be caused by a decline in the fair value of plan assets on the assets side due to disadvantageous changes in market prices as well as an increase in the obligations on the liabilities side, due for instance to a reduction in the discount rate. Furthermore, there are actuarial risks such as longevity risk (changes to the mortality tables) on the obligation side. In this context, pension risk is the risk that the pension provider will have to provide additional capital to service the vested pension commitments.
- **Financial investment risk** covers potential losses arising from fluctuations in the measurement of HVB Group's equity interests. HVB Group's financial investment risk stems from the occurrence of losses in equity provided, in connection with a financial investment to 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 altered 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.

Risk Report (Continued)

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 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 assumes an interruption of the growth in the major economies of the European Currency 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.

Implementation of the risk strategy is a task for the Bank as a whole, with key support from the Chief Risk Officer (CRO) organisation. The CRO organisation is responsible for risk management and risk policy guidelines set by the Management Board, reporting 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.

Functional separation

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

Risk controlling

Risk controlling is defined as the operational implementation of the risk strategy. The Senior Risk Management CIB & Large Commercial Bank – Credits unit and the Credit RR & NRR Germany (KRI) 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 senior management 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. (renamed from UniCredit

Business Integrated Solutions S.C.p.A., UBIS, in May 2018), 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 its insurers and pension funds supervision, and therefore need to comply with external rules and regulations. Controlling of strategic risk is the shared responsibility of HVB's Management Board.

Risk monitoring
The central risk monitoring function within the CRO organisation is responsible for identifying, measuring and evaluating the risks at HVB Group. It is subdivided in accordance with risk types. The risk monitoring functions for the following risk types: market risk and liquidity risk (for the liquidity risk, however, exclusively the risk monitoring functions of stress tests, calculation and monitoring of early warning indicators, calculation of the short-term concentration risk, evaluation of the funding plan) are bundled in the Market Risk unit, while operational risk and reputational risk is 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 (constant 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. 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 and pension risk. The available financial resources are defined, quantified and compared with the risk capital for the analysis of the risk-taking capacity.

Liquidity risk is also a quantifiable risk but does not flow into the calculation of the risk-taking capacity.

A qualitative approach is used to monitor strategic risk and reputational risk.

Implementation of overall bank management

Strategy
The business strategy and the risk strategy define the key pillars of business and risk policy for HVB Group. The essential 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 organisational structure, the key pillars of the business strategy at overall Bank level and the sub-strategies of the individual business segments.

Risk Report (Continued)

The HVB Group risk strategy is derived consistently from the business strategy, supplementing it with the relevant aspects of risk management. In this context, HVB Group's risk strategy encompasses the risk types of credit risk and market risk together with their controlling using the economic capital and risk-type-specific limits, as well as operational risk, financial investment risk, real estate risk and business risk, which are controlled using only the economic capital. The strategic objectives for reputational risk, strategic risk, liquidity risk, pension risk and outsourcing are presented in terms of quality. 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 a regular 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; they are 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 the internal capital are defined and monitored in order to ensure 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 appropriate 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 counter-measures in response to 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 12.5%. 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 appropriate capital base over the long term:

Yearly planning 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 these equity ratios as at 30 June 2019 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.

All in all, HVB Group satisfies both the regulatory requirements arising from the statutory provisions and the minimum capital ratio specified by the European Central Bank (ECB) under the Supervisory Review and Evaluation Process (SREP).

HVB and UniCredit S.p.A. agreed with the relevant regulators that HVB and HVB Group would not fall below an total capital ratio of 13%. This agreement will remain in force until further notice. The total capital ratio of HVB Group was 20% at the end of June 2019 (31 December 2018: 20.6%).

Economic capital adequacy
HVB Group determines its internal capital. The internal capital is the sum of the aggregated economic capital for all quantified risk types (with the exception of liquidity risk), a premium for pension risk and financial investment risk and the economic capital for small legal entities. 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. On account of the low risk content, the economic capital for small legal entities of HVB Group is approximated with no differentiation by risk type.

In addition, the group-wide model risk cushion, which takes account of the model risk, was included in the calculation of the ICAAP at year-end 2018. The model risk contribution is added to the aggregate economic capital to obtain the internal capital.

Risk Report (Continued)

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

Internal capital after portfolio effects (confidence level 99.90%)

Broken down by risk type	30/6/2019 € millions	30/6/2019 in %	31/12/2018 € millions	31/12/2018 in %
Credit risk	3,434	49.2	3,144	37.6
Market risk	1,418	20.3	2,004	23.9
Operational risk	435	6.2	1,263	15.1
Real estate risk	335	4.8	475	5.7
Business risk	254	3.6	234	2.8
Aggregated economic capital	**5,876**	**84.2**	**7,120**	**85.1**
Pension risk	722	10.3	874	10.4
Financial investment risk	210	3.0	185	2.2
Model risk cushion	146	2.1	161	1.9
Economic capital of small legal entities	27	0.4	28	0.3
Internal capital of HVB Group	**6,981**	**100.0**	**8,368**	**100.0**
Available financial resources of HVB Group	**18,320**		**17,170**	
Risk-taking capacity of HVB Group, in %	**262.4**		**205.2**	

Internal capital fell by €1,387 million in comparison to 31 December 2018. The decline is primarily attributable to a change in the model of operational risk as a risk type as well as to the change in the control approach from the liquidation to the going concern approach.

Applying the current methods/models retroactively to the reference date of 31 December 2018 would yield internal capital of €6,767 million (excluding 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%)

Broken down by business segment	30/6/2019 € millions	30/6/2019 in %	31/12/2018 € millions	31/12/2018 in %
Commercial Banking	1,371	22.4	1,828	24.9
Corporate & Investment Banking	4,291	70.2	4,627	63.1
Group Corporate Centre	175	2.9	514	7.0
Other	275	4.5	363	5.0
Consolidation	—	—	—	—
Internal capital (without pension risk and without the model risk cushion) of HVB Group	**6,112**	**100.0**	**7,332**	**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". Targets, triggers and limits are defined for these metrics that allow excessive risk to be identified and counter-measures to be initiated at an early stage. The matter is escalated to the appropriate 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 using a consistent going concern approach which ensures ongoing protection against risks and the continuation of business activities from a capital perspective. 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 2018 and has been in effect since then.

Risk-taking capacity

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

HVB Group uses an internal definition for the available financial resources which, 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 equity 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 and hidden losses and reserves on real estate are counted in accordance with the real estate risk calculation within available financial resources. The latter also support the fair value concept in the economic capital perspective. The available financial resources at HVB Group totalled €18,320 million as at 30 June 2019 (31 December 2018: €17,170 million).

Risk Report (Continued)

With internal capital (including the model risk cushion) of €6,981 million, the risk-taking capacity for HVB Group is 262.4% (31 December 2018: 205.2%). This figure is much higher than the target HVB Group has set itself. The rise of 57.2 percentage points in comparison with 31 December 2018 for HVB Group is attributable to an increase of €1,150 million or 6% in the available financial resources and a simultaneous reduction of €1,387 million or 16.6% in the internal capital in the first half of 2019. The rise in the available financial resources is largely as a result of the switch from the former gone concern approach to the current going concern approach, particularly from the partial inclusion of future profit under the going concern approach and from bringing the deferred taxes deduction into line with the regulatory rules for equity.

Limit concept

The risk limit system is a key component of the ICAAP at HVB Group. Its purpose is to ensure the Bank's risk-taking capacity at all times 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 and real estate risk are currently recorded. In addition, pension risk, financial investment risk, any model risks and the economic capital for small legal entities 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, as an aggregate amount for the small legal entities 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 ensured at all times. The correlation effects included in the internal capital cannot be influenced by the business segments and relevant subsidiaries. Consequently, economic capital limits adjusted for these effects and the risk-type-specific limits are used for controlling purposes in the business segments and relevant subsidiaries.

In order to identify at an early stage any potential overshooting, HVB Group has specified triggers in the form of early warning indicators as well as the defined limits. The utilisation of, and hence compliance with, the limits is monitored regularly and presented in the Bank's reports on a quarterly basis. After six months of the year, the limits are additionally checked to ensure their adequacy and, if necessary, adjusted.

Stress tests

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

Various macroeconomic downturn scenarios and a historical scenario were calculated for the cross-risk-type stress tests in the first half of 2019:

- Contagion scenario – focusing on the political tensions within the EU
- Recession scenario – recession in Germany due to a massive decline in global demand
- 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
- Interest rate shock scenario – rise in interest rates in the eurozone (calculated until March 2019)
- US hard landing and hard Brexit – recession in the USA and the UK leaves the EU without a departure agreement (from June 2019 onwards)

Taking account of macroeconomic developments in the first half of 2019, the aforementioned downturn scenarios and the underlying baseline scenario were reviewed and the corresponding macroeconomic parameters and market parameters were adjusted.

The stress tests across risk types are presented and analysed within the structure of the Stress Test Council on a quarterly basis 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 would currently be met and complied with, even after occurrence of the stress test scenarios listed. The risk-taking capacity within the scope of the stress test was established with a confidence level of 99.90%.

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

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

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

Concentrations of risk and earnings

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

Concentrations are analysed, monitored, managed and reported on a regular basis 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. Adequate monitoring, the suitability of which is reviewed at regular intervals, is used as the steering approach for the risk types of financial investment risk, real estate risk and pension risk.

Risk Report (Continued)

The risk management processes for concentrations have been optimised with regard to the interlinking of 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 regularly, 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 2019. 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. The outcome of the 2019 risk inventory will be presented to the Risk Committee and HVB's Management Board in September 2019 and included in the calculation and planning of the risk-taking capacity following approval. 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, 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. The portfolio sections used in this connection were defined for the purpose of risk controlling and are not congruent with the portfolio sections that are defined for accounting purposes in the context of the classification of financial instruments. 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 focusing on specific business segments, countries or industries, to be communicated to the Risk Committee and the units involved in risk management, among others.

Risk types in detail

We provided extensive details on the management (strategy, limitation, risk mitigation, measurement), monitoring and control of the individual types of risk in HVB Group in the 2018 Annual Report. Where the measurement methods for individual risk types have been refined, details are presented under the risk type concerned.

1 Credit risk

The economic capital for credit risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk cushion, amounts to €3,539 million, which is €51 million higher than the total reported value as at 31 December 2018 (€3,488 million).

Credit default risk
The following tables and charts for credit default risk show the aggregate exposure values (total of non-performing and performing exposure) of HVB Group including issuer risk from the trading book. Issuer risk arising from the trading book is also included in the regulatory market risk analysis by way of the incremental risk charge. The 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 €36 million (31 December 2018: €44 million).

Development of metrics by business segment

Broken down by business segment	EXPECTED LOSS[1] € millions		RISK DENSITY[2] in BPS		ECONOMIC CAPITAL[3] € millions	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Commercial Banking	163	161	16	16	991	994
Corporate & Investment Banking	167	185	13	14	2,545	2,489
Group Corporate Centre	0	0	16	6	0	3
Other	1	0	78	31	3	2
Consolidation	—	—	—	—	—	—
HVB Group	**331**	**346**	**14**	**15**	**3,539**	**3,488**

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.

In the first half of 2019, the expected loss of HVB Group decreased by €15 million and risk density by 1bp.

The main contributor to this development was the CIB business segment, where the expected loss fell by €18 million and risk density by 1bp. This can be attributed mainly to the development of the shipping industry group, where expected loss declined by €21 million.

In response, the projected loss increased by €2 million in the Commercial Banking segment, in part due to business expansion in the private customers segment.

The slight increase in economic capital in the first half of 2019 is attributable to an increase in exposure to various partners, particularly in the Corporate & Investment Banking business segment.

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

(€ millions)

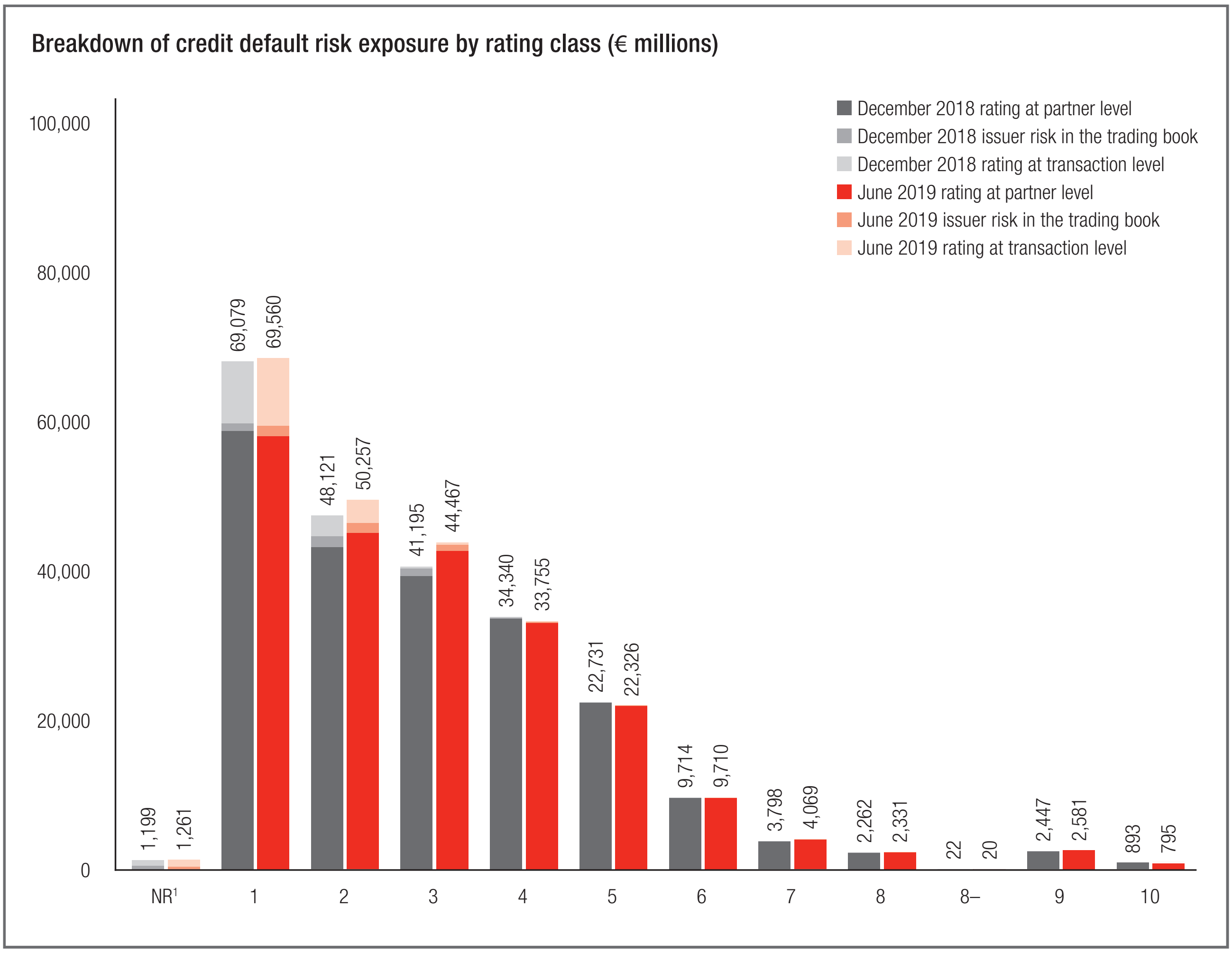
Broken down by business segment	CREDIT DEFAULT RISK EXPOSURE		OF WHICH COUNTERPARTY RISK		OF WHICH ISSUER RISK IN BANKING BOOK		OF WHICH ISSUER RISK IN TRADING BOOK	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Commercial Banking	104,110	100,563	3,549	2,823	—	—	—	—
Corporate & Investment Banking	136,912	134,941	21,860	18,346	37,207	36,947	4,166	4,270
Group Corporate Centre	6	192	0	186	6	6	—	—
Other	104	105	0	0	—	0	—	—
Consolidation	—	—	—	—	—	—	—	—
HVB Group	**241,132**	**235,801**	**25,409**	**21,355**	**37,213**	**36,953**	**4,166**	**4,270**

HVB Group's credit default risk exposure increased by €5,331 million in the first half of 2019.

In the Commercial Banking business segment exposure rose by €3,547 million in the construction, building materials, machinery and private customer industry groups, among others.

Exposure in the CIB business segment also increased by €1,971 million. The exposure reduction in the industry group financial institutions (including foreign sovereigns) was compensated by an increase of exposure in a number of other industry groups, such as special products, chemicals, pharmaceuticals and healthcare and in the public sector.

Risk Report (Continued)



1 Not rated.

The rating structure of HVB Group improved over the first half of 2019.

In rating classes 1, 2 and 3, exposure was increased while exposure remained almost unchanged in lower rating classes.

In rating class 1, exposure increased by €481 million.

In rating class 2, exposure rose by €2,136 million, which is partly due to the development in the chemicals, pharmaceuticals and healthcare, the food, beverages and agriculture industry groups.

Additional exposure amounting to €3,272 million has also been posted in rating class 3 due to positions in the financial institutions (including foreign sovereigns), telecommunications, IT, and real estate industry groups.

Development of metrics by industry group

Broken down by industry group	CREDIT DEFAULT RISK EXPOSURE € millions		OF WHICH ISSUER RISK IN TRADING BOOK € millions		EXPECTED LOSS[1] € millions		RISK DENSITY[2] in BPS	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Financial institutions (including foreign sovereigns)	55,098	58,894	2,831	2,970	29	29	6	5
Real estate	28,594	27,777	64	66	25	26	9	9
Public sector (including German sovereign)	20,790	20,078	238	307	1	2	1	1
Energy	14,313	13,938	207	142	61	59	44	43
Special products	14,227	12,532	1	17	5	8	4	6
Food, beverages, agriculture	11,512	11,155	36	48	17	16	15	15
Chemicals, pharma, healthcare	11,363	10,430	142	162	21	19	19	18
Automotive	8,979	8,812	148	125	11	9	13	11
Construction, building materials	6,972	5,606	44	32	9	9	14	16
Consumer goods, textile industry	6,891	6,657	29	22	20	16	30	25
Machinery	6,494	5,854	12	8	14	14	22	25
Services	5,930	5,771	44	39	15	16	26	29
Metals	5,913	5,702	70	83	11	13	20	24
Telecommunication, IT	5,760	5,448	137	148	10	11	18	22
Transport, travel	5,360	4,744	62	54	11	11	22	25
Electronics	3,569	2,954	74	20	3	3	10	11
Shipping	2,744	3,047	0	1	20	41	92	177
Tourism	2,579	2,428	11	10	5	7	22	29
Media, paper	2,278	2,449	10	11	5	6	24	25
Private customers	21,698	21,005	—	—	36	31	16	15
Others	68	520	6	5	2	0	324	3
HVB Group	**241,132**	**235,801**	**4,166**	**4,270**	**331**	**346**	**14**	**15**

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

The portfolio has a balanced structure and is diversified across the various industry groups.

How the top 5 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 fell significantly by €3,796 million as at 30 June 2019. This development is largely attributable to the reduction in liquidity reserves at Deutsche Bundesbank. The expected loss remained stable at €29 million. The risk density was 6bps.

Risk Report (Continued)

Rising costs from regulatory requirements and in connection with compliance (fines and investments), together with falling earnings due to partially modified business models, less demand for credit and the ongoing historically low level of interest rates led to continued strong downward pressure on margins throughout the industry group. The earnings of European banks in particular remained below those of major US banks. The provision of liquidity to banks is unproblematic in most cases. ECB policies may lead to negative interest rates for deposits in isolated cases. The banks have a stable capital base, but ten years down the line from the global financial crisis, it is still not possible to talk of a lasting recovery in the sector.

Some new geopolitical risks as well as existing ones that are intensifying again are causing turbulence and volatilities on the financial markets on a regular basis.

HVB Group has deployed a monitoring tool known as the "radar screen for financial institutions/banks" in order to be in a position to promptly identify and counter negative developments within the banking sector. A change in the exposure strategy will be adopted at short notice should bank downgrades be noted.

Part of the exposure in the financial institutions (including foreign sovereigns) industry group results 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 Group as the group-wide centre of competence for the markets and investment banking business of UniCredit and other business activities (such as export finance and guarantees).

Real estate

In the real estate industry, exposure as at 30 June 2019 increased by €817 million to €28,594 million, with projected loss down by €1 million to €25 million in comparison to 31 December 2018.

The German real estate market saw a continuation of its boom phase once again in the first half of 2019. This development still has its origins in the historically extremely low long-term interest rates, the robust labour market and the persistently strong demand for residential and commercial properties – especially in metropolitan areas. The change in investment behaviour during the most recent financial crisis in 2008 led to large shifts of assets into real estate, particularly against the backdrop of radical declines in interest rates. The purchase prices frequently outstripped growth in rental charges and continue to do so. Counteracting effects can be identified in some regional sub-markets, due to demographic developments, among other factors.

Unresolved international conflicts and uncertainty as to developments in the situation surrounding Europe and increasing dangers from trade wars could lead to worsening economic prospects in coming periods, which could have an impact on the commercial real estate market in particular. In the case of residential properties, the core markets (including Berlin, Hamburg, Munich) are showing indications of market cooling and a normalisation of sales patterns, especially in the case of high-price properties. Market observers, including Deutsche Bundesbank, warn of potentially overinflating prices and overheating markets.

Partly as a result of the conservative credit risk strategy for the real estate industry group that has been applied for years, the portfolio of existing properties remained robust and relatively low risk in the first half of 2019 and, measured in terms of risk density, was successfully kept at an unchanged low level. In a multi-year comparison, a very good risk result (measured against the actual loss) was achieved in the real estate industry group in the first half of 2019. The financing business remains focused on Germany.

HVB Group continues to place its focus on disciplined risk management in compliance with financing policies. Market and portfolio developments are monitored on an ongoing basis in order to be in a position to identify and counter negative developments at an early stage.

Public sector (including German sovereign)
In the public sector (including German sovereign) industry group, the exposure increased by €712 million in the first half of 2019. This is essentially attributable to liquidity reserves, with increasing use made of investment opportunities. The expected loss again improved while the risk density remain largely unchanged.

The public sector (including German sovereign) industry group contains private enterprises with public-sector owners as well as state entities. 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 Group's own liquidity reserves.

Energy
As at 30 June 2019, exposure in the energy industry increased by a further €375 million. If one allows for a large transaction held in the portfolio for many years where the rating has deteriorated due to a general recalibration since July 2018, the portfolio quality remained nearly unchanged in the first half of 2019, with an expected loss of €61 million (+€2 million) and an adjusted risk density of 44bps (+1bp). The exposure of this large transaction continued to decrease in the first half of 2019 and there has been a substantial improvement in the economic parameters.

In line with the defined risk strategy, we are focusing on large multinationals in the energy sector (including oil and gas). The increase in exposure over the reporting period essentially results from an expansion in the loans issued to large companies with good credit ratings.

In the case of project loans on the renewable energy side, we are concentrating on projects in countries with a stable regulatory environment and ensuring compliance with our lending standards.

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 leasing transactions and other structured financial transactions (not including project and acquisition financing).

A strategy of growth within clearly defined parameters involving conservative credit standards (for instance in relation to asset classes, rating quality) was defined for sub-segments of the special products portfolio under the 2019 risk strategy. This growth strategy was implemented in the defined sub-segments in the first half of 2019, with the total volume of the special products portfolio rising by €1,695 million compared to December 2018. The decline in non-strategic transactions will continue. The expected losses were once again reduced and the risk density remained at a very low level.

In addition, details on further industry groups of relevance with regard to their development within HVB Group are described in the following.

Risk Report (Continued)

Automotive
Exposure in the automotive industry group increased by €167 million as at 30 June 2019. This increase came almost entirely from new business with existing major customers. Supported by our rigorous, risk-oriented industry strategy and industry group policies, the portfolio's high quality remains largely unchanged. The expected loss and the risk density have deteriorated only slightly despite the ailing state of the automotive industry.

Construction, building materials
Exposure in construction, building materials rose by €1,366 million as at 30 June 2019. This rise is largely due to new business with existing accounts as part of acquisition financing and the utilisation of approved limits. With the support of our strict industry strategy and sector guidelines, the already good portfolio quality has not seen any material change.

Consumer goods, textile industry
Exposure rose by €234 million in the consumer goods, textile industry group in the first six months of 2019, and expected loss was up by €4 million. The increased exposure was mainly due to a new structured transaction (acquisition financing) with a major customer, which caused the expected loss to rise as a result of the increased risk profile. Furthermore, the deterioration in the risk situation in the relatively small textile industry portfolio was also responsible for the rise in expected loss. The risk density rose accordingly by 5bps to 30bps.

Machinery
Exposure in this industry group increased as at 30 June 2019 by €640 million. This increase is for the most part attributable to new business with good existing customers. The already good portfolio quality has improved slightly.

Shipping
Exposure in the shipping industry group continued to decrease, falling by €303 million to €2,744 million as at 30 June 2019. The expected loss has declined by half – a development justified by the improved ratings of existing customers – to €20 million; hence, the risk density has declined by 84bps to 92bps.

The industry situation was stable overall in the first half of 2019, but is still not satisfactory in some areas.

HVB Group continues to apply a conservative strategy in its ship financing activities. The focus remains on managing the risk in the existing portfolio. After the significant portfolio reduction in the shipping industry in recent years, the reduction in the existing portfolio continued in the first half of 2019. New business is written very selectively with defined core customers focusing on corporate style financing where this helps to stabilise the quality of the portfolio.

Special focus facilities
HVB Group's portfolio includes the project financing for the BARD Offshore 1 (BO1) wind farm completed in August 2013 (Ocean Breeze Energy GmbH & Co. KG, a fully consolidated subsidiary, is the owner and operator). It is located approximately 100 km off the German North Sea coast, to the north of the island of Borkum. The Bank initiated the sale of the wind farm (or the sale of the subsidiary as the owner of the wind farm). An impairment loss of €259 million was recognised in line with the requirements of IFRS 5.

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)

Broken down by eurozone countries	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Germany	139,154	137,700	1,082	891
Italy	10,344	8,729	746	784
France	8,563	8,076	352	448
Ireland	6,870	6,290	19	43
Spain	6,604	7,542	103	131
Luxembourg	5,069	5,023	55	74
Netherlands	4,263	4,434	76	183
Austria	1,826	1,928	322	378
Belgium	1,388	1,340	22	34
Finland	347	339	41	40
Greece	187	201	—	—
Cyprus	62	53	—	—
Portugal	42	102	6	52
Slovenia	22	23	4	4
Malta	5	42	—	—
Slovakia	3	3	0	1
Latvia	1	6	1	4
Lithuania	1	9	0	9
Estonia	0	2	0	2
Supranational organisations and multilateral banks	2,973	2,481	307	99
HVB Group	**187,724**	**184,323**	**3,136**	**3,177**

Exposure developed within the framework set by the risk strategy for 2019. This was specifically true in light of the stabilisation seen to date in the eurozone economy. Recently, however, there have been signs of economic weakness in the eurozone, and an unfavourable outcome to the Brexit negotiations in the autumn could have a negative impact on the economic trend in the countries of the eurozone. HVB Group continues to monitor these developments and will take suitable measures if necessary. The portfolio continued to be actively managed in the first half of 2019, albeit with different strategies.

Risk Report (Continued)

Italy

The size of the portfolio results from HVB Group's role as group-wide centre of competence for the markets and investment banking business of UniCredit. This portfolio is actively managed in accordance with market standards. The exposure to Italy also includes the exposure with UniCredit S.p.A., for which a separate strategy was defined. Economic growth in Italy weakened in the second half of 2018 such that growth in real gross domestic product (GDP) is expected to be 0.7% for the full year. There is an expectation of zero growth for 2019. The parliamentary elections in spring 2018 led to a strengthening of the Movimento Cinque Stelle and Lega political parties, who have now formed a coalition government. This government's intention to dramatically increase expenditures, while at the same time significantly reducing taxes, regardless of the fiscal rules of the European Economic and Currency Union (EECU), led to a serious conflict with the EU Commission last year. This conflict has been defused for the moment by the government stating its willingness to plan a somewhat lower budget deficit for 2019. Yet, even the corrected budget will not noticeably reduce the very high sovereign debt (in relation to GDP). Given the very weak economic growth and insufficient fiscal consolidation, government debt as a percentage of GDP is expected to rise further both this year and next. One noteworthy positive aspect is that, contrary to previous declarations, the leaders of both government parties have now stated that they no longer wish to seek Italy's withdrawal from the eurozone, which is also rejected by a clear majority of the population.

Spain and Portugal

The intense austerity and reform measures implemented in Spain and Portugal, countries formerly severely impacted by the euro crisis, have shown success. Spain, in particular, deserves special mention in this connection. It recorded relatively strong growth of 2.6% in 2018. Real GDP growth of 2.1% is expected for 2019 against the backdrop of a weaker pace of global economic growth. Alongside the robust economic growth, Spain has significantly reduced the level of unemployment since 2015. Moreover, a gradual but persistent reduction in the sovereign debt ratio is becoming apparent. The political crisis in connection with the secessionist movement in Catalonia is a factor causing uncertainty, but it has not yet had any major impact on the Spanish economy. The snap general election in April 2019 again resulted in a situation which made it difficult to form a government as the political landscape in Spain has also become increasingly fragmented. Up to now, however, difficult political circumstances, such as the previous minority government of Pedro Sanchez, have not seriously affected economic development.

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

Broken down by country/region outside the eurozone	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018
UK	11,474	11,316	130	243
USA	9,681	9,934	287	136
Japan	8,310	6,246	0	3
Switzerland	7,743	6,681	222	259
Asia/Oceania (without Japan, China, Hong Kong)	4,238	4,036	5	23
Western Europe (without Switzerland, UK)	2,284	2,248	119	124
China (including Hong Kong)	1,855	1,944	0	0
Near/Middle East	1,490	1,761	0	—
CIS/Central Asia (without Turkey)	1,212	1,193	46	28
Turkey	1,200	1,925	6	12
Africa	1,151	1,148	1	5
Eastern Europe (without eurozone countries)	1,151	1,278	176	226
North America (including offshore jurisdictions, without USA)	852	1,133	7	11
Central/South America	767	635	31	23
Without country classification	0	—	0	—
HVB Group	**53,408**	**51,478**	**1,030**	**1,093**

Over the first half of 2019, the total exposure to countries/regions outside the eurozone increased by €1,930 million, mainly on account of the growth in business in Japan.

Brexit

HVB Group is analysing the possible consequences of Brexit, particularly taking into consideration exposures to borrowers headquartered in or with dependencies on the United Kingdom.

Geopolitical flashpoints

On account of the ongoing conflict in eastern Ukraine and the difficult economic situation throughout the country, unsecured transactions with Ukrainian banks remain on hold. Russia's acts of intervention in Ukraine have led to a continuation of the existing sanctions imposed by the EU and USA that impact the cross-border business with Russia. This is reflected in the decline in exposure, as new business is not written unless all the sanctions are observed and customer interests have been taken into account on a case-by-case basis.

The Turkish economy has come under pressure primarily from the domestic policy issues since the failed coup d'état in the summer of 2016 and from the environment of gradually rising interest rates in the USA which is likely to make investments in emerging economies, such as Turkey, generally less attractive. In 2018, there was thus a substantial decrease in the foreign portfolio investments that have financed the country's large current account deficit to date. In view of this fact, the economy has entered a recession. A severe contraction of the real gross domestic product can be expected for 2019 overall. As a result, a reduction strategy adopted for business with the high-risk country of Turkey will continue to be followed.

Risk Report (Continued)

The Near/Middle East region is additionally suffering from the growing tensions between Saudi Arabia and Iran and the fall in the oil price to a significantly lower level since mid-2014. This is forcing Saudi Arabia and the Gulf States to make downward adjustments to public spending in the medium term despite their considerable fiscal reserves, an action that might give rise to discontent in their respective populations. Furthermore, there are political risks due to the confrontation between several Gulf States including Saudi Arabia and Qatar.

Moreover, there is elevated risk arising from the tension between Iran and the USA. HVB Group is continuously monitoring these developments to react quickly, if necessary, to a negative turn of events.

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

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

On the basis of these replacement values and not taking into account any risk-reducing effects, the maximum counterparty risk for HVB Group as at 30 June 2019 totalled €78.9 billion (31 December 2018: €60.7 billion).

In accordance with the regulatory provisions under Basel III and 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 €4.5 billion as at 30 June 2019 (31 December 2018: €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.

Derivative transactions

(€ millions)

	NOMINAL AMOUNT					FAIR VALUE			
	RESIDUAL MATURITY			TOTAL		POSITIVE		NEGATIVE	
	UP TO 1 YEAR	MORE THAN 1 YEAR UP TO 5 YEARS	MORE THAN 5 YEARS	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Interest rate derivatives	1,218,763	918,528	850,980	2,988,271	2,513,721	67,837	46,707	61,941	42,543
Foreign exchange derivatives	248,456	41,662	3,243	293,361	266,824	2,260	3,234	2,511	3,624
Cross-currency swaps	50,645	102,269	47,779	200,693	200,263	4,797	5,666	4,584	5,519
Equity/index derivatives	51,962	41,855	15,383	109,200	79,912	2,462	3,271	3,009	3,119
Credit derivatives	8,185	10,480	1,400	20,065	28,584	198	223	330	341
– Protection buyer	4,042	5,636	779	10,457	14,830	128	87	263	263
– Protection seller	4,143	4,844	621	9,608	13,754	70	135	67	77
Other transactions	8,620	5,357	659	14,636	12,338	1,384	1,568	1,126	807
HVB Group	**1,586,631**	**1,120,151**	**919,444**	**3,626,226**	**3,101,642**	**78,938**	**60,669**	**73,501**	**55,953**

Derivative transactions with a residual maturity of up to three months accounted for a nominal total amount of €792,930 million as at 30 June 2019 (thereof credit derivatives: €2,133 million).

Derivative transactions by counterparty type

(€ millions)

	FAIR VALUE			
	POSITIVE		NEGATIVE	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Central governments and central banks	9,367	7,188	1,383	1,242
Banks	39,011	30,729	41,320	32,556
Financial institutions	26,866	19,232	28,342	20,164
Other companies and private individuals	3,694	3,520	2,456	1,991
HVB Group	**78,938**	**60,669**	**73,501**	**55,953**

Summary and outlook

The Bank has put a strong focus on sustainable growth with simultaneous risk control in its business strategy. The goal is still to maintain a healthy credit portfolio on an ongoing basis.

Despite continued expectations of global economic growth, there remain numerous uncertainties of economic and geopolitical nature that have to be taken into consideration in any assessment of the macroeconomic environment.

2 Market risk

The economic capital for market risk at HVB Group, without taking account of diversification effects between the risk types, amounts to €1,537 million and has changed significantly in comparison with the figure as at 31 December 2018 (€2,357 million). The decline is essentially due to a change in the primary control approach from the gone-concern (liquidation approach) to the going concern approach. If the current approach is applied retroactively to the reference date for market risk, the result is economic capital of €1,453 million as at 31 December 2018.

Risk Report (Continued)

The following table shows the aggregated market risk for the trading positions at HVB Group over the course of the year.

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

	AVERAGES					PERIOD-END TOTALS	
	2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	30/6/2019	31/12/2018
Credit spread risks	3	3	3	3	3	3	3
Interest rate positions	5	4	5	5	5	4	4
Foreign exchange positions	1	1	1	2	2	1	1
Equity/index positions[1]	3	3	3	3	3	3	3
HVB Group[2]	**6**	**6**	**5**	**7**	**8**	**5**	**6**

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

The regulatory capital requirements for the past twelve months are described below, broken down by the relevant risk metrics.

Regulatory capital requirements of HVB Group (€ millions)

	30/6/2019	31/3/2019	31/12/2018	30/9/2018	30/6/2018
Value at risk	62	58	80	84	74
Stressed value at risk	219	196	288	255	289
Incremental risk charge	248	249	222	236	281
Market risk Standard Approach	24	25	25	20	17
CVA value at risk	12	11	10	11	12
Stressed CVA value at risk	89	82	86	83	79
CVA Standard Approach	25	27	26	27	30

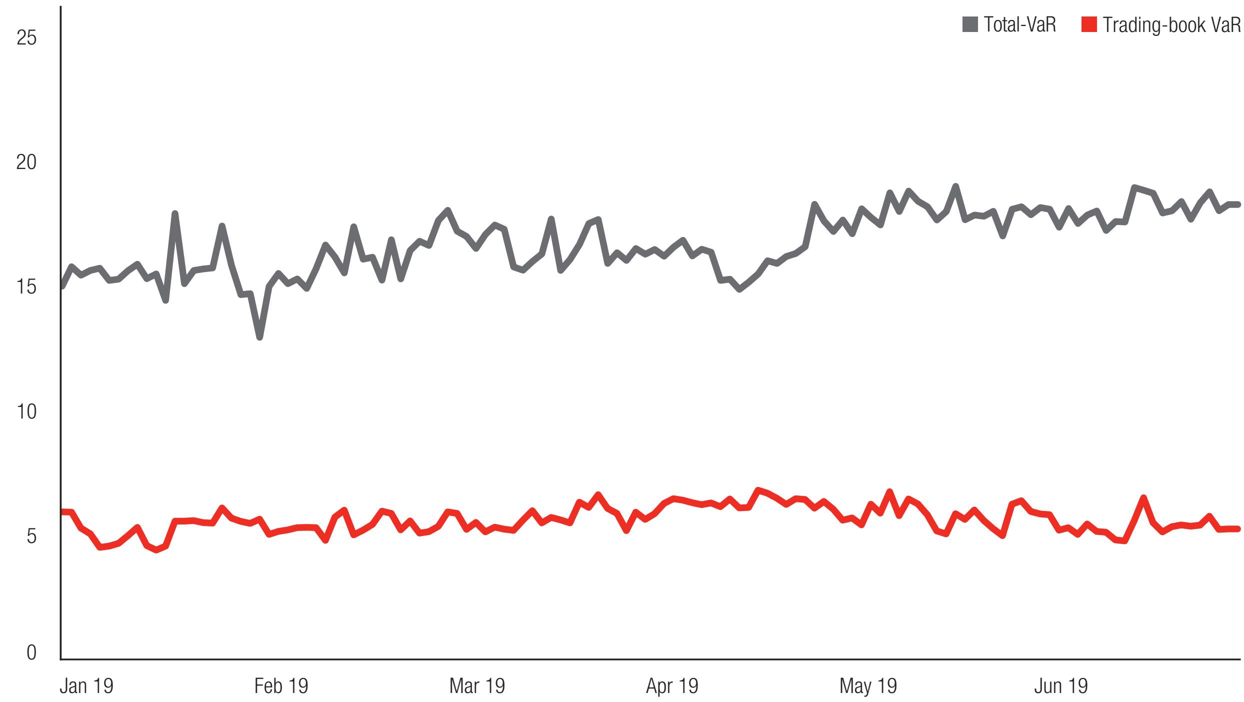
Alongside the market risk relevant for regulatory reporting, further market risk arises from positions in the banking book. All transactions exposed to market risk in the trading and banking books of HVB Group are consolidated for the purpose of risk controlling. Most of the market risk arises from positions of the CIB business segment at HVB Group.

Market risk from trading- and banking-book activities of HVB Group (VaR, 99.00% confidence level, one-day holding period) (€ millions)

	AVERAGES					PERIOD-END TOTALS	
	2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	30/6/2019	31/12/2018
Credit spread risks	18	18	17	17	18	19	13
Interest rate positions	7	7	6	6	7	7	5
Foreign exchange positions	3	3	3	4	4	3	4
Equity/index positions[1]	3	3	3	3	3	3	3
HVB Group[2]	**17**	**17**	**16**	**18**	**20**	**18**	**16**

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

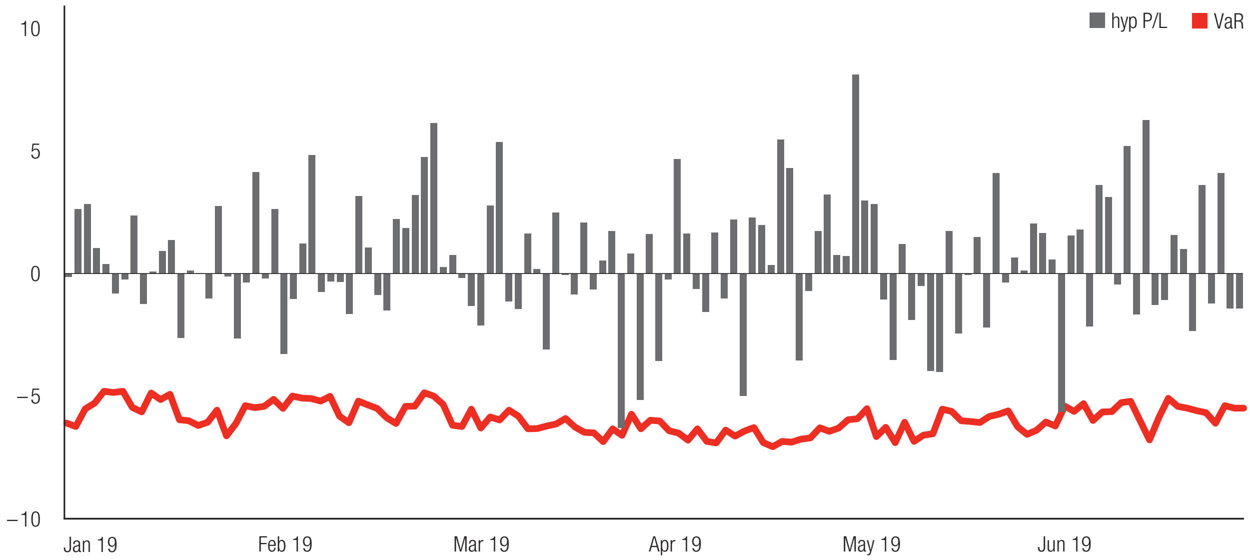
Development of trading-book and total value-at-risk at HVB Group (€ millions)



The total value at risk (VaR) at HVB Group shows the VaR curve for market price risk arising from trading- and banking-book positions. The trading-book VaR represents the development of the VaR in the trading book. Both the total VaR and the trading book VaR displayed relatively stable risk development in 2019.

Risk Report (Continued)

Regulatory back-testing of the internal model at HVB for the first half of 2019 (€ millions)



The forecasting quality of the VaR measurement method is reviewed by means of regular back-testing that compares the computed regulatory VaR figures with the changes in the hypothetical portfolio value (hyp P/L). A reportable back-testing outlier occurred in the first half of 2019. The hypothetical loss was larger than the forecast VaR figure on this day (see the chart "Regulatory back-testing of the internal model at HVB for the first half of 2019"). This outlier was primarily caused by severe fluctuations of interest rates.

Alongside back-testing using the hypothetical change in value, HVB also uses a back-testing method based on the change in the actual portfolio value to validate the model. In the first half of 2019, there were four instances of a limit being exceeded, which were due to regular adjustments to measurement.

Besides back-testing, further methods are used at regular 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 at regular intervals and limits set for them if they are material.

Interest rate risk in the banking book
The main objective of the strategy in the interest rate risk in the banking book is to reduce the negative effects on net interest income caused by fluctuations in interest rates in a multi-year horizon. The strategy aims at generating sustainable earnings that guarantee a return on investment in line with the strategic plan. The strategy does not imply any intended directional positioning or any scope of discretion for generating additional earnings, unless approved by relevant bodies and separately monitored. The only exception is for those functions authorised to carry interest rate positions within the approved limits. Management's strategy on the structural mismatch between non-interest bearing assets and non-interest bearing liabilities (free funds) aims to achieve a balance between a stable flow of earnings in a multi-year horizon and the opportunity cost of having a fixed interest rate. The interest rate risk strategy takes into account the potential impact of prepayments, which is estimated on the basis of historical prepayment data as well as trend analyses. The risk of premature repayments in German mortgage banking is driven by the level of the interest rates and by the behaviour of customers regardless of the interest rate level. The interest-rate-sensitive prepayments are rather low at the current level of interest rates and are hedged using swaptions. The non-interest rate sensitive prepayments are hedged using cash flow adjustments.

HVB Group measures and monitors this risk in line with the corresponding Group policy that establishes consistent methodologies and models and limits or thresholds to focus on, with regard to the sensitivity of net interest income and the present value. Generally, the Treasury department hedges interest rate risk exposure from commercial banking transactions.

A key component of the measurement of interest rate risk in the banking book is the consideration of the economic value (present value perspective). This shows the effects of fluctuations in the interest rate on the economic value of assets and liabilities. The economic value of the Bank can be viewed as the present value of the Bank's expected net cash flows, defined as the expected cash flows on assets minus the expected cash flows on liabilities. A relevant risk measure from this perspective is the economic value sensitivity per time bucket for a 1bp interest rate shock. The result is reported to the relevant committees to assess the economic impact of various changes in the yield curve.

In compliance with the regulatory rules, the change in the fair value of the banking book in the event of a sudden and unexpected interest rate shock of plus/minus 200bps is compared with the Bank's eligible equity funds on a monthly basis. This analysis is carried out both with and without the hedging effect from the equity capital model book. At 30 June 2019, the calculation of the present value from the managerial viewpoint taking into account the interest rate shocks of around 200bps gives rise to a capital requirement of 0.80% (31 December 2018: 0.35%). When calculated from the regulatory viewpoint, by contrast, a capital charge of 11.3% becomes apparent given an increase in interest rates of 200bps (31 December 2018: 10.2%). HVB Group is well below the specified 20% mark (in relation to the capital charge), above which the banking supervisory authorities consider a bank to have increased interest rate risk. These figures include HVB's positions as well as the positions of the material Group companies, customer margins are not included.

Risk Report (Continued)

Furthermore, additional stress test scenarios are performed on a regular basis to estimate the impact on short term interest rate up/down movements and nonparallel shocks, such as steepening and flattening scenarios. The two latter mentioned scenarios constitute a standardised interest rate shock scenario according to the Basel requirements with pivot point of 3.5 or six years (steepening: short rate down and long rate up/flattening: short rate up and long rate down) while a short rate up/down scenario considers simply the short term interest rate changes.

In addition to the net present value approach, a simulation of the 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 of interest rates on net interest income. It shows the difference between income generated from interest-sensitive assets and the expense of interest-sensitive liabilities. An example of the management of net interest income sensitivity is a parallel interest rate shock of plus 100 basis points (bps). It provides an indication of the impact of such an interest rate shock on net interest income over the next 12 months if such a shock should occur. On the assumption of an unchanged balance sheet, i.e. assuming that balance sheet items remain constant during this period and that the expiring contracts are reinvested within this time horizon with the same product features, the net interest income would increase by €116 million (31 December 2018, plus 100bps: €190 million) by taking into account elasticity assumptions for sight and savings deposits. A parallel interest rate shock of minus 30bps for transactions in euro and foreign currencies combined with minus 100bps interest rate shock for foreign currencies in USD and GBP would reduce net interest income for the same period by minus €65 million (31 December 2018: minus 30/minus 100bps: minus €119 million). Depending on the contractual agreement with the customer a floor of 0.0% 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.

The resulting sensitivity analysis was carried out on the basis of the planned net interest income for the 2019 financial year. The change in results as at year-end can be explained by the changed positions held by the Bank and the persistently low interest rates.

Furthermore, additional stress test scenarios are performed on a regular basis to estimate the basis risk (resulting from the imperfect correlation in lending and borrowing interest rates for different instruments and products) and nonparallel shocks. Model assumptions are also incorporated into the analysis. This relates notably to products with unknown and/or undefined maturities and included options. The interest rate risk inherent in these product types in the banking book is measured on the basis of assumptions and analyses of customer behaviour in the lending and deposit-taking business.

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 to set against the market turnover.

Increased volatility on financial markets could also make it more difficult for HVB Group to measure some assets and commitments. A further consequence could be significant changes in the fair value of such assets and commitments, which could prove to be considerably lower than the current or estimated fair values. All these factors could force HVB Group to recognise impairments or writedowns, which would have a negative impact on the financial position, the operating profit and hence on the liquidity of HVB Group.

Summary and outlook
Efforts in the first half of 2019 to concentrate on low market risk customer business in our trading activities in the financial markets will be ongoing throughout the whole of 2019. HVB Group will continue to invest in the development and implementation of electronic sales platforms for trading activities.

3 Liquidity risk

Short-term liquidity risk
Within the framework of our limit system, we showed an overall positive balance of short-term liquidity risk of €39.7 billion at HVB Group for the three-month maturity bucket at the end of June 2019 (30 June 2018: €28.1 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 €17.1 billion at the end of first half of 2019 (30 June 2018: €19.2 billion).

Our stress tests are calculated using institution-specific, market-wide and combined scenarios. The calculations at the end of the first half of 2019 showed that the available liquidity reserves cover the funding requirement beyond the minimum period required.

The requirement of having a liquidity coverage ratio (LCR) of a minimum of 100% to ensure that an institution is able to meet its short-term payment obligations assuming an acute stress scenario over a horizon of 30 days was significantly exceeded at HVB as at 30 June 2019 with a figure in excess of 100%.

Funding risk
The funding risk of HVB Group was again low in the first half of 2019 thanks to our broad funding base in terms of products, markets and investor groups. This ensured that we were able to obtain adequate funding at all times for our lending operations in terms of volume and maturity within the framework of our limit system. By the end of June 2019, HVB Group had obtained longer-term funding with a volume of €6.4 billion (30 June 2018: €3.8 billion). There has been no regulatory minimum ratio for the NSFR to date. HVB adhered to a ratio of over 100% in the first half of 2019. Similarly, the adjusted NSFR greater than three years was over 100% in the first half of 2019. We do not expect to face any significant liquidity risk in the future either. With their very high credit quality and liquidity, our Pfandbriefe still remain an important funding instrument.

Summary and outlook
There is continued global uncertainty with regard to security, monetary and economic policy arising from ongoing geopolitical conflicts in the Arab world and elsewhere, as well as a number of trade policy disagreements from various directions, especially relating to the USA, China, Russia and the European Union (EU). In this context, the economy is currently weakening worldwide, despite ongoing economic growth.

In Europe, uncertainty continues regarding the overall impact of the impending final withdrawal of the United Kingdom from the EU, as well as lack of any design and underlying agreements governing potential future economic links. It is impossible to predict the extent and intensity of the reaction by the global financial markets to the developments worldwide seen as a whole. HVB Group again put in a good performance in the first half of 2019 in a demanding market environment. Our good liquidity situation, sound financing structure, and liquidity management measures were key factors contributing to this. In this context, we expect our liquidity situation to remain comfortable in future. Our forward-looking risk quantification and regular scenario analysis will remain important factors in this regard going forward.

Risk Report (Continued)

4 Operational risk

The operational risk of HVB Group is calculated for HVB and its material subsidiaries – HVB Immobilien AG, UniCredit Luxembourg S.A. 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 minor subsidiaries.

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 individual data sources are aggregated by applying the Bayesian model to the loss distribution parameters for each model risk category.

The VaR is determined using a Monte Carlo simulation, taking account of correlations between the model risk categories as well as risk-reducing measures such as insurance policies. Finally, the VaR is modified to reflect internal control and business environment factors.

The model was developed by UniCredit S.p.A. HVB checks the plausibility of the calculation results on a regular basis and validates the model to ensure that it is appropriate.

The AMA model for calculating the capital for operational risk was changed at the end of the second quarter of 2019. The changes essentially included adjusting the method for selecting the appropriate distribution of loss volumes for each model risk category. In addition to other changes, including an adjustment for control and business environment factors, the model was adjusted for the purpose of implementing the requirements set out in Chapter 3, Sections 2 and 3 of Commission Delegated Regulation (EU) 2018/959 of 14 March 2018 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards of the specification of the assessment methodology under which competent authorities permit institutions to use Advanced Measurement Approaches for operational risk.

Furthermore, with effect from the end of the second quarter, the approach used to calculate HVB Group's economic capital for operational risk was harmonised with the approach used by UniCredit. In line with UniCredit's approach, economic 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. Previously, the economic capital was calculated using the internal AMA model at HVB Group level with subsequent allocation to HVB and its AMA subsidiaries.

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 for all significant IT risks within the ICT management processes, among other things, 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 will be 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 so as to minimise their impact on HVB. Several successfully completed contingency tests showed that the performance of the critical business processes also works in emergency situations. In addition, the emergency precautions are adapted constantly to accommodate new threats. Evidence of the appropriateness and proper functioning of the crisis management system was additionally provided by a crisis exercise in the first half of 2018.

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

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

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

The management of compliance risk is normally a task of the Bank's Management Board. Pursuant to Section 25a of the German Banking Act (Kreditwesengesetz – KWG), it is required to ensure that a proper business organisation is in place, encompassing in particular effective risk management, including an ICS. The compliance function forms part of the ICS that helps the Management Board to manage compliance risk.

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. Money-laundering and fraud prevention as well as preventive measures against infringements of financial sanctions and embargos are also assigned to the Compliance unit. The Compliance functions also deal with issues which are not core to compliance, such as Payment Service Directive II, consumer lending and distance selling transactions. 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
A failure to deal appropriately with various legal and regulatory requirements may lead to litigation and administrative proceedings or investigations and subject HVB and/or other companies belonging to HVB Group to damage claims, regulatory fines or other penalties.

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 it is possible to reliably estimate the amount of possible losses, and the loss is considered likely, appropriate provisions have been set up based on the circumstances and consistent with IFRS accounting principles applied by HVB Group.

Risk Report (Continued)

HVB and other companies belonging to HVB Group are involved in various legal proceedings. The following is a summary of cases against HVB or 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.

VIP 4 Medienfonds Fund

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 inadequate advice was provided by the Bank 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.

Closed-end funds

Investors filed lawsuits against HVB and claim insufficient advice was provided by the Bank within the scope of their investment in closed-end funds. In particular, the investors claim that HVB did not or did not fully disclose any refunds made to the Bank or they were advised on the basis of an allegedly incorrect prospectus. The questions regarding a correct and sufficient advice provided to a customer as well as questions regarding the limitation period and thus the success prospects in proceedings depend on the individual circumstances of the particular case and are therefore difficult to predict. As far as these proceedings were disputed, the experience of the past has shown that the deciding courts have largely ruled in favour of HVB.

Derivative transactions

The number of complaints and lawsuits filed against HVB by customers in connection with inadequate advice in the context of the conclusion of derivative transactions is declining. Among other things, the arguments raised are that the Bank allegedly did not sufficiently inform the customer with respect to potential risks related to such transactions and especially did not inform the customer about a potential initial negative market value of the derivative. Experience gained so far show that the characteristics of the relevant product and the individual circumstances of each case are decisive. In particular, the statute of limitations, the client's economic experience and risk tolerance, and the actual investment advice given may be relevant aspects.

Proceedings related to claims for withholding tax credits

On 31 July 2014 the Supervisory Board of HVB concluded its internal investigation 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. These proceedings are ongoing.

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 former bank employees by the Cologne prosecutor, HVB was informed 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 examined internally. HVB continues to cooperate with the authorities.

The Munich tax authorities are currently performing a regular field audit of HVB for the years 2009 to 2012 as well as the ongoing follow-up audits for the years 2013 to 2015 which includes, among other things, 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 days, 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 deemed appropriate.

Lawsuit for consequential damages

A customer filed an action against HVB for consequential damages of €236 million for the following reasons: In 2010, HVB was ordered by Frankfurt Higher Regional Court to pay damages in the amount of €4.8 million to the plaintiff due to the faulty handling of a bill of exchange and in addition to compensate further damages suffered by the plaintiff as a result of this deficiency. In 2011, the plaintiff filed an action against HVB with Frankfurt Regional Court for alleged consequential damages in the amount of €33.7 million and extended this action several times to a total of €236 million, in the meantime. By ruling dated 31 August 2017, Frankfurt Regional Court dismissed the claim and followed HVB's opinion on the claim being unfounded and the allegations raised by the plaintiff being unreasonable. The meanwhile filed appeal of the plaintiff against the court ruling to the Frankfurt Higher Regional Court was dismissed on 19 March 2019. The Frankfurt Higher Regional Court acknowledged the justification given by the Regional Court fully and did not permit an appeal. The plaintiff filed a complaint against not admitting the case to the third instance to the Federal Court of Justice, which is still pending.

Financial sanctions matters

In March 2011, HVB received a subpoena from the District Attorney for New York County ("DANY") relating to historical transactions involving certain Iranian entities designated by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") and their affiliates. In the subsequent years, DANY, the U.S. Department of Justice ("DOJ"), OFAC, the New York State Department of Financial Services ("DFS"), and the Board of Governors of the Federal Reserve System and the New York Federal Reserve Bank ("Fed") (collectively "U.S. and New York authorities") initiated their own investigations respecting historical compliance by UniCredit S.p.A., HVB, and UniCredit Bank Austria AG (together "Group") with applicable U.S. sanctions laws and regulations.

Risk Report (Continued)

UniCredit S.p.A., HVB and UniCredit Bank Austria AG have each cooperated extensively with the U.S. and New York authorities, including conducting their own voluntary investigation of their U.S. dollar payments practices and its historical compliance with applicable U.S. financial sanctions, in the course of which certain historical non-transparent practices were identified. Even before the conclusion of these investigations, the Group initiated substantial and substantive remediation activities relating to policies and procedures, which are ongoing.

On 15 April 2019, UniCredit S.p.A., HVB and UniCredit Bank Austria AG reached a resolution with the U.S. and New York authorities regarding these investigations. As part of such resolution, UniCredit S.p.A., HVB, and UniCredit Bank Austria AG entities have paid penalties totalling approximately $1.3 billion and have agreed to implement certain remedial policies and procedures. The amount owed by the respective entities is entirely covered by their provisions, and the final penalty amount will not have a material impact on the UniCredit group. No further enforcement actions are expected relating to the subject of the resolved investigation.

As part of the settlements with the U.S. and New York authorities (DANY, OFAC, DOJ, DFS and Fed), UniCredit S.p.A., HVB, and UniCredit Bank Austria AG made certain commitments to implement remedial compliance controls and conduct risk assessments relating to the UniCredit group's global business lines, to provide periodic reports and certifications concerning the implementation and effectiveness of the group's compliance programme to the U.S. and New York authorities, and to engage an independent external party to conduct an annual review of the effectiveness of the group's compliance programme whose findings will be shared with the U.S. and New York authorities. Most of these reporting requirements will expire after three to five years, but may be extended at the discretion of the U.S. and New York 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 on 28 June 2016 the decision of Bankruptcy Judge Chapman on the omnibus motion was issued. In her decision, Judge Chapman dismissed the case against HVB and the other Noteholder Defendants.

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

On 13 April 2018, LBSF filed notice of appeal to the Second Circuit Court of Appeals. The parties exchanged pleadings. The Appeal hearing was held on 26 June 2019 and we await judgement.

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.

UniCredit S.p.A. and 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 fulfill 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. 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 have been 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 consolidated class action complaint 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. The consolidated class action complaint does not include a quantification of damages claimed. The proceedings are in their inception. Motions to dismiss – a procedural device contemplated by the United States Federal Rules of Civil Procedure which provides defendants with an opportunity to challenge the legal sufficiency of a complaint and present arguments that the complaint should be dismissed – are currently scheduled to be fully briefed by December 2019 and will include the argument that the complaint fails to state a claim.

Summary and outlook

The risk strategy specifies the specific action areas that have been identified for strengthening, on an ongoing basis, risk awareness with regard to operational risk in the Bank and expanding the management of operational risk.

Risk Report (Continued)

5 Other risks

In the section entitled "Other risks", HVB Group groups together the following types of quantifiable risk as other risks: real estate risk, business risk, pension risk and financial investment risk as well as the strategic risk and reputational risk types, which are 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 (strategic) real estate required for operations and (non-strategic) real estate that is not used for operations. In the first half of 2019, the general focus for the existing real estate portfolio was placed on measures targeting fair value and cost optimisation. In principle, no acquisitions are planned except where they would serve the interests of HVB Group (in other words only in defined exceptional cases). The longer term orientation for strategic real estate corresponds with the Bank's strategy of preferring Bank-owned properties over rented properties for own use and making such properties available for the banking operations of HVB Group at market terms on a cost-optimised basis.

Facility concepts are drawn up for both the Bank-owned portfolio and the rented properties, under which the requirements of the business segments and also economic viability are the key factors for decisions, taking into account the assumptions listed.

In terms of the central locations, for the first half of 2019 this related primarily to the next stages of the "HVB Tower" large-scale project. The first stage (renovation of the tower block with a view to turning it into a green building) was brought to a successful conclusion in March 2016 and the property was reoccupied. Another measure relating to the "HVB Tower" project concerns the renovation of a further low-rise section of the building ("Flachbau Nord"). The project is scheduled to run until at least the end of 2021. As part of the further objective of consolidating areas at the Munich location, several projects were integrated into each other, packaged as the "Munich Campus Transformation" (MCT) project. In addition, further major renovation work is being carried out at the central locations that is unlikely to be completed before the end of 2019.

The main risks for the Bank-owned portfolio stem mainly from the development of the current fair value, which is always compared with the carrying amount. The risk drivers are the future usage by the Bank, property rents/Bank rents, market rents, rental contract periods, occupancy rate and required investment. The medium to long-term goal for the non-strategic real estate portfolio, on the other hand, is to realise the best possible value upon disposal of the overall portfolio; in this regard, the impact on both the income statement and the Bank's other management instruments is crucial for the individual decisions. This tallies with the overarching strategy for dealing with real estate risk.

The economic capital for the real estate risk at HVB Group, without taking account of diversification effects between the risk types and without the model risk cushion, amounts to €435 million at 30 June 2019, which represents a decrease of €201 million (31 December 2018: €636 million). The fully diversified economic capital for the real estate risk at HVB Group stands at €335 million (31 December 2018: €475 million). The change in economic capital is mainly attributable to the use of the group-wide real estate risk model, which uses a Bayesian estimate rather than the variance/covariance approach, and a different capital allocation process incorporating the potential risk of extreme values (tail risk). Other factors affecting the estimates of economic capital include changes in the composition of the real estate portfolio (on account of the introduction of IFRS 16) and in the market value development of property assets.

Applying the group-wide real estate risk model introduced in the first half of 2019 retroactively to the reference date, the comparative value for economic capital as at 31 December 2018 would be €406 million, excluding diversification effects between the risk types and excluding the model risk premium. The elimination of the effect of the change in model results in an increase of €29 million in economic capital. If the effect of the introduction of IFRS 16 is also eliminated, this produces an increase in economic capital of €2 million.

The risk figures relate to a portfolio valued at €3,944 million.

Breakdown of the real estate portfolio by type

	PORTFOLIO VALUE € millions		SHARE in %	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Strategic real estate	1,941	2,216	49.2	57.1
Non-strategic real estate	2,003	1,665	50.8	42.9
HVB Group	**3,944**	**3,881**	**100.0**	**100.0**

From a geographical perspective, the focus is on the Munich region with 53.9% of the value of the portfolio located there.

The impact of macroeconomic scenarios on real estate risk is analysed within the scope of the cross-risk-type stress tests. These quarterly analyses provide information on the estimated, scenario-related lower real estate prices that would ensue compared with the base scenario, should the scenario materialise. This is the basis on which stressed VaR is determined.

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. HVB Group has specified corresponding initiatives intended to counter the earnings risks.

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 HVB Group's business risk, without taking account of diversification effects between the risk types and without the model risk cushion, increased slightly by €7 million to €387 million in the first half of 2019 (31 December 2018: €380 million). The fully diversified economic capital for HVB Group's business risk totals €254 million as at 30 June 2019 (31 December 2018: €234 million).

The impact of macroeconomic scenarios on business risk is analysed within the scope of the cross-risk-type stress tests. This quarterly analysis provides information on the estimated, scenario-related lower earnings that would result should the scenario occur compared with the base scenario. In addition, the stressed VaR is determined.

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 capital investments and the cash flows on the obligations side. A figure of €722 million was determined as at 30 June 2019 for the total pension risk of HVB Group (31 December 2018: €874 million). The lower value compared to the year end is due in part to an adjustment to longevity risk approved by the Risk Committee. The adjustment was made based on updated mortality tables to calculate pension obligations, which reduce the probability of sponsor companies having to inject more capital in future. Furthermore, the present value of the pension obligations is less stressed due to the lower discount interest rate of 1.55% as at the end of the first half of 2019. The risk figure is incorporated in the calculation of the risk-taking capacity in the form of an additive component to the internal capital. In addition, the impact on pension risk is analysed at regular intervals as part of the cross-risk-type stress tests.

Risk Report (Continued)

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. Yields fell again in the first half of 2019 (at year-end 2018, the discount rate stood at 2.10%, and it was 1.55% as at 30 June 2019), thus causing the pension obligations to rise once more. Even at this level, however, a further decline in interest rates cannot be ruled out. There are currently still no regulatory provisions for the measurement of pension risks that have been harmonised at a European level. This gives rise to uncertainty regarding the future development of the disclosed pension risk and, depending on how the provisions are ultimately structured, this might lead to an increase in the pension risk.

Financial investment risk

The financial investment portfolio mainly consists of unlisted interests, private equity investments (co-investments and direct investments), equity derivatives and other fund shares (real estate funds and other closed-end funds). All the investments to be included in the 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.

The economic capital for financial investment risk at HVB Group, without taking into account any diversification effects between the risk types and without the model risk cushion, rose by €25 million and stands at €210 million as at 30 June 2019 (31 December 2018: €185 million). HVB Group's fully diversified economic capital amounts to €210 million as at 30 June 2019 (31 December 2018: €185 million).

Breakdown of the financial investment portfolio

	PORTFOLIO VALUE € millions		SHARE in %	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Private equity investments	19	19	9.0	10.3
Other holdings[1]	191	166	91.0	89.7
HVB Group	**210**	**185**	**100.0**	**100.0**

1 Listed and unlisted investments.

For the purpose of the cross-risk-type stress tests, a 100% capital charge is assumed for the stressed economic capital irrespective of the macroeconomic scenarios.

As was the case in the first half of 2019, HVB Group will continue to selectively dispose of non-strategic shareholdings in the second half of the year. It will also look into setting up new companies and making fresh investments in line with its business strategy and the current market environment, provided these complement our structure and our business priorities, and generate added value for HVB and HVB Group.

Strategic risk

The statements made on strategic risk in the 2018 Annual Report still apply. Changes in the performance of the overall economy and the ratings of HVB are shown in the economic report in the Interim Management Report.

Reputational risk

The statements made on reputational risk in the 2018 Annual Report still apply.

Risks arising from outsourcing activities

Outsourcing involves the transfer of activities and processes to external service providers. This involves the transfer of some of the liability for operational risk, 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 material", "material without significant impact" and "material with significant impact". In accordance with the group-wide regulations on outsourcing management, these arrangements are also subdivided into "not relevant" and "relevant" in line with the provisions of the Bank of Italy's Circular no. 263. An in-depth risk analysis covering the other risk types as well as operational risk is performed for all outsourcing arrangements classified as "material" or "relevant". A retained organisation (RTO) responsible for the arrangement is set up for each material outsourcing arrangement that manages the risks identified. The identified risks are incorporated in HVB Group's risk management in the processes defined for the risk types concerned. The operational risk managers help the project managers and the heads of the RTOs to prepare and/or update the related risk analyses.

Two new outsourcing arrangements at HVB in the Luxembourg branch were put in place with UniCredit International Bank S.A. These relate to (i) back-office services covering data maintenance and transaction execution (master data, securities, payments) and (ii) application support for various ICT applications. Both are classified as material without significant impact. This did not give rise to any material change to the risk for HVB.

No new material outsourcing arrangements were put in place in HVB Group in the first half of 2019.

Consolidated Income Statement

Consolidated Income Statement

INCOME/EXPENSE	NOTES	1/1–30/6/2019 € millions	1/1–30/6/2018 € millions	CHANGE € millions	CHANGE in %
Interest income[1]		1,813	1,890	(77)	(4.1)
Negative interest on financial assets		(68)	(76)	+ 8	(10.5)
Interest expense		(709)	(704)	(5)	+ 0.7
Negative interest on financial liabilities		113	134	(21)	(15.7)
Net interest	6	1,149	1,244	(95)	(7.6)
Dividends and other income from equity investments	7	2	9	(7)	(77.8)
Net fees and commissions	8	488	543	(55)	(10.1)
Net trading income	9	338	378	(40)	(10.6)
Net gains/(losses) on financial assets and liabilities at fair value	10	2	(39)	+ 41	
Net gains/(losses) on derecognition of financial instruments measured at cost	11	5	17	(12)	(70.6)
Net other expenses/income	12	491	231	+ 260	>+ 100.0
Payroll costs		(723)	(735)	+ 12	(1.6)
Other administrative expenses		(617)	(722)	+ 105	(14.5)
Amortisation, depreciation and impairment losses on intangible and tangible assets		(383)	(113)	(270)	>+ 100.0
Operating costs	13	(1,723)	(1,570)	(153)	+ 9.7
Credit impairment losses IFRS 9	14	(80)	101	(181)	
Provisions for risks and charges	15	288	(339)	+ 627	
Restructuring costs		—	(1)	+ 1	(100.0)
Net gains/(losses) on disposals of investments	16	13	28	(15)	(53.6)
PROFIT BEFORE TAX AND IMPAIRMENT ON GOODWILL		**973**	**602**	**+ 371**	**+ 61.6**
Impairment on goodwill		—	—	—	—
PROFIT BEFORE TAX		**973**	**602**	**+ 371**	**+ 61.6**
Income tax for the period		(370)	(340)	(30)	+ 8.8
PROFIT AFTER TAX		**603**	**262**	**+ 341**	**>+ 100.0**
CONSOLIDATED PROFIT		**603**	**262**	**+ 341**	**>+ 100.0**
attributable to the shareholder of UniCredit Bank AG		602	261	+ 341	>+ 100.0
attributable to minorities		1	1	—	—

1 The item "Interest income" contains interest of €1,460 million (prior-year period: €1,451 million) calculated using the effective interest rate method. The figure is based on classification according to IFRS 9.

Earnings per share

(in €)

	NOTES	1/1–30/6/2019	1/1–30/6/2018
Earnings per share (undiluted and diluted)	17	0.75	0.33

Consolidated statement of total comprehensive income

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Consolidated profit recognised in the income statement	**603**	**262**
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)	(347)	2
Change in fair value attributable to change in the credit risk of financial		
liability designated aFVtPL (own credit spread reserve)	10	(4)
Other changes	—	—
Taxes on income and expenses not to be reclassified to the income statement in future periods	106	—
Income and expenses to be reclassified to the income statement in future periods		
Changes from foreign currency translation	—	2
Changes from companies accounted for using the equity method	—	—
Changes in valuation of financial instruments (hedge reserve)	3	(1)
Unrealised gains/(losses)	3	—
Gains/(losses) reclassified to the income statement	—	(1)
Changes in valuation of financial instruments at FVTOCI (FVTOCI reserve)	10	(13)
Unrealised gains/(losses)	15	(12)
Gains/(losses) reclassified to the income statement	(5)	(1)
Other changes	(4)	4
Taxes on income and expenses to be reclassified to the income statement in future periods	(2)	4
Total income and expenses recognised in equity under other comprehensive income	**(224)**	**(6)**
Total comprehensive income	**379**	**256**
of which:		
attributable to the shareholder of UniCredit Bank AG	378	255
attributable to minorities	1	1

Consolidated Balance Sheet

ASSETS	NOTES	30/6/2019 € millions	31/12/2018 € millions	CHANGE € millions	CHANGE in %
Cash and cash balances		17,643	19,990	(2,347)	(11.7)
Financial assets held for trading	18	73,739	68,957	+ 4,782	+ 6.9
Financial assets at fair value through profit or loss	19	15,694	16,683	(989)	(5.9)
Financial assets at fair value through					
other comprehensive income	20	8,481	7,370	+ 1,111	+ 15.1
Loans and receivables with banks (at cost)	21	33,266	33,648	(382)	(1.1)
Loans and receivables with customers (at cost)	22	139,173	133,706	+ 5,467	+ 4.1
Hedging derivatives	23	286	276	+ 10	+ 3.6
Hedge adjustment of hedged items in the					
fair value hedge portfolio		49	36	+ 13	+ 36.1
Investments in associates and joint ventures	24	10	23	(13)	(56.5)
Property, plant and equipment	25	1,313	2,489	(1,176)	(47.2)
Investment properties		247	256	(9)	(3.5)
Intangible assets		146	149	(3)	(2.0)
of which: goodwill		130	130	—	—
Tax assets		1,353	1,375	(22)	(1.6)
Current tax assets		145	132	+ 13	+ 9.8
Deferred tax assets		1,208	1,243	(35)	(2.8)
Non-current assets or disposal groups held for sale	26	1,869	742	+ 1,127	>+ 100.0
Other assets		1,283	988	+ 295	+ 29.9
TOTAL ASSETS		**294,552**	**286,688**	**+ 7,864**	**+ 2.7**

LIABILITIES	NOTES	30/6/2019 € millions	31/12/2018 € millions	CHANGE € millions	in %
Deposits from banks	27	66,419	62,943	+ 3,476	+ 5.5
Deposits from customers	28	119,813	121,038	(1,225)	(1.0)
Debt securities in issue	29	26,551	24,360	+ 2,191	+ 9.0
Financial liabilities held for trading	30	50,941	48,105	+ 2,836	+ 5.9
Financial liabilities at fair value through profit or loss	31	5,663	5,152	+ 511	+ 9.9
Hedging derivatives	32	881	598	+ 283	+ 47.3
Hedge adjustment of hedged items					
in the fair value hedge portfolio	33	2,026	1,210	+ 816	+ 67.4
Tax liabilities		586	429	+ 157	+ 36.6
Current tax liabilities		448	275	+ 173	+ 62.9
Deferred tax liabilities		138	154	(16)	(10.4)
Liabilities of disposal groups held for sale	34	83	—	+ 83	+ 100.0
Other liabilities		1,507	1,649	(142)	(8.6)
Provisions	35	2,474	3,453	(979)	(28.4)
Shareholders' equity		17,608	17,751	(143)	(0.8)
Shareholders' equity attributable to the shareholder					
of UniCredit Bank AG		17,605	17,748	(143)	(0.8)
Subscribed capital		2,407	2,407	—	—
Additional paid-in capital		9,791	9,791	—	—
Other reserves		4,766	4,998	(232)	(4.6)
Changes in valuation of financial instruments		39	32	+ 7	+ 21.9
Hedge reserve		28	28	—	—
FVTOCI reserve		11	4	+ 7	>+ 100.0
Consolidated profit 2018		—	520	(520)	(100.0)
Net profit 1/1–30/6/2019[1]		602	—	+ 602	+ 100.0
Minority interest		3	3	—	—
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**294,552**	**286,688**	**+ 7,864**	**+ 2.7**

1 Attributable to the shareholder of UniCredit Bank AG.

The 2018 profit available for distribution disclosed in the separate financial statements of UniCredit Bank AG (corresponding to the consolidated profit of HVB Group), which forms the basis for the appropriation of profit, amounts to €520 million. On 3 June 2019, the Shareholders' Meeting adopted a resolution to pay a dividend of €520 million to UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €0.65 per share after around €1.62 in the 2017 financial year.

Statement of Changes in Shareholders' Equity

	SUBSCRIBED CAPITAL	ADDITIONAL PAID-IN CAPITAL	OTHER RESERVES		
			TOTAL OTHER RESERVES	OF WHICH: OWN CREDIT SPREAD	OF WHICH: PENSIONS AND SIMILAR OBLIGATIONS (IAS 19)
Shareholders' equity at 1/1/2019	**2,407**	**9,791**	**4,998**	**—**	**(1,230)**
Consolidated profit recognised in the consolidated income statement	**—**	**—**	**—**	**—**	**—**
Total income and expenses recognised in equity under other comprehensive income[4]	**—**	**—**	**(231)**	**7**	**(238)**
Changes in valuation of financial instruments not affecting income	—	—	7	7	—
Changes in valuation of financial instruments affecting income	—	—	—	—	—
Actuarial gains/(losses) on defined benefit plans	—	—	(238)	—	(238)
Reserve arising from foreign currency translation	—	—	—	—	—
Other changes	—	—	—	—	—
Total other changes in equity	**—**	**—**	**(1)**	**—**	**—**
Dividend payouts	—	—	—	—	—
Transfers from consolidated profit	—	—	—	—	—
Changes in group of consolidated companies	—	—	(1)	—	—
Capital decreases	—	—	—	—	—
Shareholders' equity at 30/6/2019	**2,407**	**9,791**	**4,766**	**7**	**(1,468)**
Shareholders' equity at 1/1/2018	**2,407**	**9,791**	**5,289**	**—**	**(1,161)**
Changes on initial application of IFRS 9	—	—	38	(21)	—
Shareholders' equity restated at 1/1/2018	**2,407**	**9,791**	**5,327**	**(21)**	**(1,161)**
Consolidated profit recognised in the consolidated income statement	**—**	**—**	**—**	**—**	**—**
Total income and expenses recognised in equity under other comprehensive income[4]	**—**	**—**	**—**	**(3)**	**1**
Changes in valuation of financial instruments not affecting income	—	—	(3)	(3)	—
Changes in valuation of financial instruments affecting income	—	—	—	—	—
Actuarial gains/(losses) on defined benefit plans	—	—	1	—	1
Reserve arising from foreign currency translation	—	—	2	—	—
Other changes	—	—	—	—	—
Total other changes in equity	**—**	**—**	**2**	**—**	**—**
Dividend payouts	—	—	—	—	—
Transfers from consolidated profit	—	—	—	—	—
Changes in group of consolidated companies	—	—	2	—	—
Capital decreases	—	—	—	—	—
Shareholders' equity at 30/6/2018	**2,407**	**9,791**	**5,329**	**(24)**	**(1,160)**

1 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. The Shareholders' Meeting of 11 June 2018 resolved to distribute the 2017 consolidated profit in the amount of €1,300 million to our sole shareholder UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €1.62 per share.
2 Attributable to the shareholder of UniCredit Bank AG.
3 UniCredit Bank AG (HVB).
4 See Consolidated statement of total comprehensive income.

(€ millions)

CHANGE IN VALUATION OF FINANCIAL INSTRUMENTS							
AFS RESERVE	HEDGE RESERVE	FVTOCI RESERVE	CONSOLIDATED PROFIT[1]	PROFIT 1/1–30/6[2]	TOTAL SHARE-HOLDERS' EQUITY ATTRIBUTABLE TO THE SHAREHOLDER OF HVB[3]	MINORITY INTEREST	TOTAL SHARE-HOLDERS' EQUITY
n/a	**28**	**4**	**520**	**—**	**17,748**	**3**	**17,751**
n/a	**—**	**—**	**—**	**602**	**602**	**1**	**603**
n/a	**—**	**7**	**—**	**—**	**(224)**	**—**	**(224)**
n/a	3	10	—	—	20	—	20
n/a	—	(3)	—	—	(3)	—	(3)
n/a	—	—	—	—	(238)	—	(238)
n/a	—	—	—	—	—	—	—
n/a	(3)	—	—	—	(3)	—	(3)
n/a	**—**	**—**	**(520)**	**—**	**(521)**	**(1)**	**(522)**
n/a	—	—	(520)	—	(520)	(1)	(521)
n/a	—	—	—	—	—	—	—
n/a	—	—	—	—	(1)	—	(1)
n/a	—	—	—	—	—	—	—
n/a	**28**	**11**	**—**	**602**	**17,605**	**3**	**17,608**
52	**28**	**—**	**1,300**	**—**	**18,867**	**7**	**18,874**
(52)	—	25	—	—	11	—	11
n/a	**28**	**25**	**1,300**	**—**	**18,878**	**7**	**18,885**
n/a	**—**	**—**	**—**	**261**	**261**	**1**	**262**
n/a	**3**	**(9)**	**—**	**—**	**(6)**	**—**	**(6)**
n/a	—	(8)	—	—	(11)	—	(11)
n/a	(1)	(1)	—	—	(2)	—	(2)
n/a	—	—	—	—	1	—	1
n/a	—	—	—	—	2	—	2
n/a	4	—	—	—	4	—	4
n/a	**—**	**—**	**(1,300)**	**—**	**(1,298)**	**(6)**	**(1,304)**
n/a	—	—	(1,300)	—	(1,300)	—	(1,300)
n/a	—	—	—	—	—	—	—
n/a	—	—	—	—	2	(6)	(4)
n/a	—	—	—	—	—	—	—
n/a	**31**	**16**	**—**	**261**	**17,835**	**2**	**17,837**

Consolidated Cash Flow Statement (abridged version)

(€ millions)

	2019	2018
Cash and cash equivalents at 1/1	19,990	36,414
Net cash provided/used by operating activities	(1,412)	(25,614)
Net cash provided/used by investing activities	(49)	3,670
Net cash provided/used by financing activities	(886)	(1,313)
Effects of exchange rate changes	—	—
Less non-current assets or disposal groups held for sale	—	—
Cash and cash equivalents at 30/6	17,643	13,157

Legal basis

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

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

We did not avail ourselves of the possibility of reviewing the present Half-yearly Financial Report of HVB Group compliant with Section 115 (5) of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG).

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

The amounts shown in the tables and texts below relate to the period from 1 January to 30 June of the respective year for disclosures regarding the income statement and to the reporting date of 30 June 2019 for disclosures regarding balance sheet items and totals and to 31 December 2018 for disclosure for the previous year.

Accounting and Valuation

1 Accounting and valuation principles

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

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

The amendments to the following standards newly published or revised by the IASB are mandatorily applicable in the European Union (EU) for the first time in the 2019 financial year:

Standards

IFRS 16 – “Leases”

Interpretations

IFRIC 23 – “Uncertainty over Income Tax Treatments”

Amendments and improvements

– Annual improvements to the 2015–2017 IFRS cycle (IFRS 3, IFRS 11, IAS 12 and IAS 23)
– Amendments to IFRS 9 “Financial Instruments” – Prepayment Features with Negative Compensation
– Amendments to IAS 28 “Investments in Associates and Joint Ventures” – Long-term Interests in Associates and Joint Ventures
– Amendments to IAS 19 “Employee Benefits” – Plan Amendment, Curtailment or Settlement

New or amended accounting and valuation methods compared with the previous year

The new or amended rules to be applied for the first time in the reporting period that are relevant for HVB Group are shown below and the related effects discussed:

In some sub-areas, HVB has further developed liquidity management for the foreign currency portfolio using forward exchange transactions outside the trading book and, in this context, has decided to accrue or defer the difference between the spot and forward rates (swap rate) and recognise it under net interest. The accounting treatment of existing forward exchange transactions of the banking book in other sub-areas outside of Germany was adapted to this approach and the recognition changed. Therefore, interest income of €25 million and interest expense of €66 million were recognised on the accrual or deferral of swap rates in the first half of 2019, while a net loss of €36 million was recorded under net trading income for these transactions in the first half of 2018 from the accrual or deferral of swap rates. The change in the reporting method better reflects the commercial basis of the respective activities in the banking book (investment of funds in foreign currency, refinancing in euros and hedging through forward exchange transactions) and results in the financial statements providing more reliable and relevant information on the effects of business activities. The previous year’s figures were not restated for materiality reasons.

As part of the optimisation of its payment transaction activities, HVB has decided to adjust the recognition of expenses for the purchase of certain payment transaction services (an external service provider carries out the activities required for the settlement of payment transactions on behalf of the Bank) and of services in connection with credit card payments or credit card management. These expenses are now reported under commission expense instead of operating costs. In view of the adjustments made in recent years to the pricing scheme for accounts and payment services, it is more appropriate to set off the expenses for the purchase of the services as commission expense from commission income for these services. The change in recognition results in the financial statements providing more reliable and relevant information on the respective banking services. Consequently, €21 million is recognised as commission expense in the first half of 2019, whereas €21 million was shown as operating costs for the purchase of these services in the first half of 2018. The previous year’s figures were not restated for materiality reasons.

First-time adoption of IFRS 16 Leases
On 13 January 2016, the IASB published the new accounting standard IFRS "Leases", which supersedes the previous standard for lease accounting IAS 17 "Leases" as well as the accompanying interpretations IFRIC 4 "Determining whether an Arrangement Contains a Lease", SIC-15 "Operating Leases – Incentives" and SIC-27 "Evaluating the Substance of Transactions Involving the Legal Form of a Lease". The incorporation of IFRS 16 into European law (endorsement) took place on 31 October 2017. Adoption of the standard is mandatory in the EU for financial years starting on or after 1 January 2019.

According to the new lease definition of IFRS 16, an agreement is or contains a lease when it grants the right to control the use of a specific asset for a specified period in exchange for a fee. HVB Group applies IFRS 16 to individual leases in full, and for agreements that establish or contain a lease, it generally accounts for each lease component separately from the non-lease components of the agreement as a lease. The rules in the new standard apply to leases relating to our property, plant and equipment/investment properties. IFRS 16 does not apply to leases on intangible assets.

For the lessee, IFRS 16 eliminates the previous classification of lease agreements as either operating leases or finance leases, and instead introduces a uniform lessee accounting model (right-of-use approach). According to this approach, for these lease agreements the lessee generally recognises an asset for the right of use of the underlying leased property and a corresponding lease liability for the obligation to make the outstanding lease payments. This means that previously unrecognised leases now have to be accounted for in a manner largely comparable to the recognition of finance leases in accordance with IAS 17. As a result, the capitalisation of the rights of use and the recognition of the corresponding lease liabilities as a liability leads to an extension of the balance sheet. As at 1 January 2019, our total assets increased by €373 million due to the adoption of IFRS 16.

Nevertheless, IFRS 16 provides the lessee with simplification options that allow short-term lease agreements with terms of up to 12 months and leases for low-value assets to be omitted from the balance sheet. HVB Group is exercising its right to use the simplified presentation of these leases and is directly recognising the associated lease payments – using the previous method of handling operating leases in accordance with IAS 17 – on a straight-line basis over the term of the lease as an expense in the consolidated income statement.

The rights of use reported under property, plant and equipment are recognised at cost less accumulated depreciation and if applicable any impairment losses. The right-of-use costs are determined as the present value of future lease payments plus initial direct costs, prepayments and dismantling costs, and less incentive payments received. Scheduled depreciation of the right of use is applied on a straight-line basis over the term of the lease. Available extension and purchase options are taken into account if these options are likely to be exercised.

The initial measurement of lease liabilities contained in the item "Deposits from customers" is applied at the present value of the future lease payments. The 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 using the lessee's incremental borrowing rate, i.e. the rate of interest that a lessee would have to pay to raise funds in a similar economic environment in order to obtain an asset of a similar value at comparable conditions. As a rule, we base our discount on the incremental borrowing rate because the interest rate implicit in the lease is generally not available to us. In the course of subsequent measurement, the lease liability is updated using the effective interest method from accounting mathematics, much like the rules for finance leases in IAS 17 applicable up to now. The carrying amount of the lease liability is compounded and reduced by the amount of the lease payments made with no effect on income.

Accounting and Valuation (CONTINUED)

The adoption of IFRS 16 also results in changes to the consolidated income statement. The lease payments previously made by the lessee under operating leases in accordance with IAS 17, which were recognised as an other operating expense or under operating costs on a straight-line basis over the lease term if they were rental expenses, have now been replaced by depreciation expenses for the capitalised rights of use and interest expenses from the compounding of lease liabilities recognised as liabilities. Scheduled and unscheduled depreciation, impairments and write-ups on the rights of use reported under property, plant and equipment are recognised under the item “Depreciation and impairment losses on intangible and tangible assets” within operating costs. Compounding of the lease liability is carried out in interest expense as a component of net interest. In addition to the changed disclosure items with regard to the recognition of the lease expense, the accounting rules of IFRS 16 also result in slightly higher expenses than IAS 17 at the beginning of the term of a lease (front loading).

For accounting at the lessor, the rules of IAS 17 have essentially been incorporated unchanged into the new IFRS 16, such that the dual lessor accounting model which classifies lease agreements as either operating leases or finance leases is still applicable.

HVB Group adopted IFRS 16 for the first time on 1 January 2019. The initial adoption is being carried out in conformity with the transitional regulations according to the modified retrospective method. The figures for the comparable period were not restated. There were no initial adoption effects in equity.

During the transition to the new lease standard, we are making use of the accounting simplification option for lessees and lessors regarding the use of the new definition of lease agreements which eliminates the need to re-evaluate whether agreements in place prior to 1 January 2019 should be reclassified in whole or in part as leases in accordance with IFRS 16. The assessments reached in accordance with the previous rules of IAS 17 / IFRIC 4 were applied to the whole contract portfolio (grandfathering).

In its transition to the new standard, HVB Group applies the following simplification options and practical aids afforded by IFRS 16 for lessees:

- For lease agreements previously classified as operating leases under IAS 17, the lease liability is recognised at the present value of the outstanding lease payments discounted by the incremental borrowing rate as at 1 January 2019. The weighted average incremental borrowing rate was 2.36% p.a. The corresponding right of use is recognised in the amount of the lease liability.
- Rather than carry out an impairment review, the right of use at the time of initial adoption is reduced in a simplified manner by the amount as at 31 December 2018 recognised as a provision for onerous leases.
- Lease agreements which end by 31 December 2019 at the latest are treated as short-term leases, regardless of the original term of the agreement.
- We did not use the retroactive determination and consideration of the initial direct costs in the measurement of the right of use at the time of initial adoption.
- In specifying the term of lease agreements, the exercise of options to extend or terminate the lease was assessed according to the current state of the facts rather than retrospectively determining the likelihood that these options would be exercised when the agreement was initiated.

Upon the first-time adoption of IFRS 16, obligations arising under operating leases are recognised as rights of use or lease liabilities in the consolidated balance sheet for the first time.

In addition, the rights of use and lease liabilities contain leases which were previously accounted for as finance leases under IAS 17. For finance leases, the leased assets were shown in the consolidated balance sheet of the lessee under property, plant and equipment, and the corresponding obligation under deposits from customers. On 1 January 2019, the previous finance lease agreements with carrying amounts as at 31 December 2018 were recognised as a right of use and lease liability, and as a result were accounted for in accordance with IFRS 16.

In the context of the transition to IFRS 16, as at 1 January 2019, assets were recognised for the rights of use to the underlying leased assets of €373 million and lease liabilities of €546 million. A significant share of the newly recognised rights of use and liabilities comprise the real estate rented by HVB Group.

Based on the off-balance-sheet operating lease obligations as at 31 December 2018, the following table shows the reconciliation to the opening balance sheet value of the lease liabilities carried as liabilities as at 1 January 2019:

(€ millions)

Off-balance sheet obligations from operating leases in accordance with IAS 17 as at 31/12/2018	**289**
Application relief for short-term leases	(21)
Application relief for leases of low-value assets	—
Changes related to extend or terminate a lease	146
Others	(3)
Obligations from operating lease arrangements (gross amount undiscounted) as at 1/1/2019	**411**
Effect from the discounting with the incremental borrowing rate as at 1/1/2019	(38)
Obligation from operating lease arrangements (discounted) as at 1/1/2019	**373**
Adoption in the consolidated balance sheet as additional recognised lease liabilities	
due to first-time application of IFRS 16 as at 1/1/2019	**373**
Carrying amount of lease liabilities from finance leases in accordance with IAS 17 as at 31/12/2018	173
Carrying amount of total lease liabilities in accordance with IFRS 16 as at 1/1/2019	**546**

The initial value of the off-balance sheet obligations from operating leases in accordance with IAS 17 of €251 million as of 31 December 2018 was adjusted by €38 million to €289 million based on the operating lease portfolio additionally identified in the contract analysis.

Accounting and Valuation (CONTINUED)

As shown in the following table, the difference between the amounts stated for the rights of use and the lease liabilities results mainly from the difference between the carrying amount of the leased items and the carrying amount of the lease liabilities from finance leases due to the impairment losses recognised in previous years, the offsetting of rights of use from provisions set up in connection with onerous leases as well as the derecognition of rights of use to the leased item in the case of subleases classified by the intermediary as finance leases:

(€ millions)

Leasing liabilities as at 1/1/2019	**546**
Adoption as initial value for the recognition of right of use assets as at 1/1/2019	**546**
Difference between the carrying amount of the leased assets and the lease liabilities from finance leases	
due to impairment losses in previous years	(123)
Offsetting with provisions for onerous lease arrangements	(29)
Derecognition in case of sub-leases classified as finance leases	(21)
Others	—
Carrying amount of right of use assets as at 1/1/2019	**373**
thereof: carrying amount of right of use assets from previous finance leases	50

As at 30 June 2019, the rights of use capitalised in the consolidated balance sheet amounted to €339 million and the recognised lease liabilities to €485 million. Moreover, in the first half of 2019, €25 million was recognised in depreciation expenses for the rights of use and €2 million in interest expense for the lease liabilities in the consolidated income statement.

Other new or amended accounting rules

We have also applied the remaining new or amended accounting rules. These have had no effect or no material effect on the consolidated financial statements.

Apart from the amendments described, the accounting and measurement methods have been applied unchanged compared with the previous year. These are described in the notes to the consolidated financial statements in the 2018 Annual Report.

We refer to the information contained in the notes to the consolidated financial statements in the 2018 Annual Report on the effects of IFRS that have been published but are not yet applicable.

For the effects of the first-time adoption of IFRS 9 included in the previous-year figures, please refer to the detailed explanations in the 2018 consolidated financial statements.

2 Companies included in consolidation

The following companies were added to the group of companies included in consolidation in the first half of 2019:
– Elektra Purchase No. 64 DAC, Dublin
– Wealthcap Objekt Dresden GmbH & Co. KG, Munich
– Wealthcap Objekt-Vorrat 24 GmbH & Co. KG, Munich
– Wealthcap Objekt-Vorrat 25 GmbH & Co. KG, Munich
– WealthCap Wohnen 1 GmbH & Co. KG, Munich
– Wealthcap Wohnen 1a GmbH & Co. KG, Munich
– Weicker S. à r.l., Luxembourg

The following companies left the group of companies included in consolidation in the first half of 2019 due to merger, sale or imminent or completed liquidation:
– Elektra Purchase No. 48 DAC, Dublin
– HVB Capital Partners AG, Munich
– SwanCap Partners GmbH, Munich

The following companies left the group of companies included in consolidation in the first half of 2019 for reasons of materiality:
– Delpha Immobilien- und Projektentwicklungs GmbH & Co. Großkugel Bauabschnitt Beta Management KG, Munich
– Life Management Erste GmbH, Munich
– paydirekt Beteiligungsgesellschaft privater Banken mbH, Berlin
– Transterra Gesellschaft für Immobilienverwaltung mbH, Munich
– Verwaltungsgesellschaft Katharinenhof mbH, Munich
– WealthCap Objekt-Vorrat 20 GmbH & Co. KG, Munich

The deconsolidation of these companies does not have any material impact. The share of these companies in the total assets of the Group stood at 0.001% as at 31 December 2018.

With effect as of 1 June 2019, UniCredit Services S.C.p.A., Germany branch, a unit responsible for the administration and management of HVB properties, was transferred to HVB. This unit is an independent business operation with 154 employees and essentially has the pension plans for these employees. In line with HVB's methods for recognition and measurement of mergers under common control, the purchase price of €1 million, which was determined by an external expert, has been recorded in equity.

Segment Reporting

3 Notes to segment reporting by business segment

In segment reporting, the activities of HVB Group are divided into the following business segments and consolidation effects:

– Commercial Banking
– Corporate & Investment Banking (CIB)
– Group Corporate Centre
– Other
– Consolidation

The Other/consolidation business segment is shown separately for the first time as at the reporting date. The previous year's figures have been adjusted accordingly.

The information provided in the segment reports is based on HVB's internal management. Income and expenses can thus be recognised here for internal management purposes that are not based solely on external business activities but on internal transfers etc. Where such internal income and/or expenses between the respective segments are recognised in identical items of the segmented income statement, they are netted across all the segments. Any effects remaining from internal transfers are eliminated in the consolidation so that only external income/expenses remain as the result in the total amount of the segmented income/expenses across all segments, including the consolidation.

Method of segment reporting

The same principles are being applied in the 2019 financial year as were used at year-end 2018. We use risk-weighted assets compliant with Basel III as the criterion for allocating tied equity capital. In 2019, the core capital allocated to the business segments of HVB as a proportion of risk-weighted assets compliant with Basel III was left at the core capital ratio of 12.5%. The interest rate used to assess the equity capital allocated to companies assigned to several business segments (HVB and UniCredit Luxembourg S.A.) was 1.07% in the 2018 financial year. This interest rate was redetermined for the 2019 financial year and has been 0.98% since 1 January 2019.

The figures in previous periods affected by this reorganisation have been adjusted accordingly.

Loans and advances to banks have been included in addition to the previously already segmented disclosures of volume-related figures by business segment. The previous year's figures have been supplemented.

4 Income statement, broken down by business segment

Income statement, broken down by business segment for the period from 1 January to 30 June 2019 (€ millions)

INCOME/EXPENSES	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	GROUP CORPORATE CENTRE	OTHER	CONSOLIDATION	HVB GROUP
Net interest	732	401	32	(3)	(13)	1,149
Dividends and other income from equity investments	2	—	—	—	—	2
Net fees and commissions	362	130	(2)	—	(2)	488
Net trading income	10	320	1	5	—	336
Net other expenses/income	(18)	41	35	34	4	96
OPERATING INCOME	**1,088**	**892**	**66**	**36**	**(11)**	**2,071**
Payroll costs	(300)	(198)	(175)	(50)	—	(723)
Other administrative expenses	(513)	(351)	163	75	9	(617)
Amortisation, depreciation and impairment losses						
on intangible and tangible assets	(6)	(328)	(5)	(44)	—	(383)
Operating costs	**(819)**	**(877)**	**(17)**	**(19)**	**9**	**(1,723)**
OPERATING PROFIT	**269**	**15**	**49**	**17**	**(2)**	**348**
Net write-downs of loans and provisions for						
guarantees and commitments	(30)	(54)	4	—	—	(80)
NET OPERATING PROFIT	**239**	**(39)**	**53**	**17**	**(2)**	**268**
Provisions for risks and charges	86	195	7	—	—	288
Restructuring costs	—	—	—	—	—	—
Net income from investments	11	18	377	11	—	417
PROFIT BEFORE TAX	**336**	**174**	**437**	**28**	**(2)**	**973**
Income tax for the period	(135)	(117)	(114)	(5)	1	(370)
PROFIT AFTER TAX	**201**	**57**	**323**	**23**	**(1)**	**603**
Impairment on goodwill	—	—	—	—	—	—
CONSOLIDATED PROFIT	**201**	**57**	**323**	**23**	**(1)**	**603**
attributable to the shareholder of UniCredit Bank AG	201	58	322	22	(1)	602
attributable to minorities	—	—	1	—	—	1

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	1,149	—	1,149
Dividends and other income from equity investments	2	—	2
Net fees and commissions	488	—	488
Net trading income	336	2	338
Financial assets mandatorily at FVTPL		11	
Financial liabilities designated at FVTPL		38	
Buy-backs of securities issued		(1)	
Effects arising from hedge accounting		(26)	
Fair value equity		(20)	
Net gains/losses on financial assets and liabilities at fair value	n/a	2	2
Financial assets mandatorily at FVTPL		(11)	
Financial liabilities designated at FVTPL		(38)	
Net gains/losses on the sale of financial securities (held-for-sale business model)		5	
Effects arising from hedge accounting		26	
Fair value equity		20	
Net gains/losses on derecognition of financial instruments measured at cost	n/a	5	5
Net gains/losses on the sale of performing loans and receivables and securities		4	
Buy-backs of securities issued		1	
Net other expenses/income	96	395	491
Net gains/losses on the sale of performing loans and receivables and securities		(4)	
Income from the sale of land and buildings		148	
Income from valuation/disposals of investment properties		251	
Income from the sale of other assets		—	
OPERATING INCOME	**2,071**	**404**	**2,475**
Payroll costs	(723)	—	(723)
Other administrative expenses	(617)	—	(617)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(383)	—	(383)
Operating costs	**(1,723)**	**—**	**(1,723)**
OPERATING PROFIT	**348**	**404**	**752**
Net write-downs of loans and provisions for guarantees and commitments/			
credit impaired losses IFRS 9	(80)	—	(80)
NET OPERATING PROFIT	**268**	**404**	**672**
Provisions for risks and charges	288	—	288
Restructuring costs	—	—	—
Net income from investments	417	(417)	n/a
Net gains/losses on the sale of securities (held-for-sale business model)		(5)	
Income from the sale of land and buildings		(148)	
Income from valuation/disposals of investment properties		(251)	
Income from the sale of other assets		—	
Net gains/losses on disposals of investments		(13)	
Net gains/losses on disposals of investments	n/a	13	13
PROFIT BEFORE TAX AND IMPAIRMENT ON GOODWILL	**—**	**—**	**973**
Impairment on goodwill	—	—	—
PROFIT BEFORE TAX	**973**	**—**	**973**
Income tax for the period	(370)	—	(370)
PROFIT AFTER TAX	**603**	**—**	**603**
Impairment on goodwill	—	—	—
CONSOLIDATED PROFIT	**603**	**—**	**603**
attributable to the shareholder of UniCredit Bank AG	602	—	602
attributable to minorities	1	—	1

Income statement, broken down by business segment for the period from 1 January to 30 June 2018 (€ millions)

INCOME/EXPENSES	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	GROUP CORPORATE CENTRE	OTHER	CONSOLIDATION	HVB GROUP
Net interest	728	519	13	(2)	(14)	1,244
Dividends and other income from equity investments	—	1	—	—	—	1
Net fees and commissions	402	141	(5)	—	(3)	535
Net trading income	35	286	16	1	—	338
Net other expenses/income	(11)	74	43	36	4	146
OPERATING INCOME	**1,154**	**1,021**	**67**	**35**	**(13)**	**2,264**
Payroll costs	(300)	(191)	(187)	(57)	—	(735)
Other administrative expenses	(539)	(376)	160	63	(10)	(702)
Amortisation, depreciation and impairment losses						
on intangible and tangible assets	(6)	(58)	(14)	(43)	(5)	(126)
Operating costs	**(845)**	**(625)**	**(41)**	**(37)**	**(15)**	**(1,563)**
OPERATING PROFIT	**309**	**396**	**26**	**(2)**	**(28)**	**701**
Net write-downs of loans and provisions for						
guarantees and commitments	(91)	164	28	—	—	101
NET OPERATING PROFIT	**218**	**560**	**54**	**(2)**	**(28)**	**802**
Provisions for risks and charges	(104)	(236)	1	—	—	(339)
Restructuring costs	—	(1)	—	—	—	(1)
Net income from investments	11	—	101	28	—	140
PROFIT BEFORE TAX	**125**	**323**	**156**	**26**	**(28)**	**602**
Income tax for the period	(92)	(210)	(36)	(10)	8	(340)
PROFIT AFTER TAX	**33**	**113**	**120**	**16**	**(20)**	**262**
Impairment on goodwill	—	—	—	—	—	—
CONSOLIDATED PROFIT	**33**	**113**	**120**	**16**	**(20)**	**262**
attributable to the shareholder of UniCredit Bank AG	33	113	119	16	(20)	261
attributable to minorities	—	—	1	—	—	1

Segment Reporting (Continued)

Development of the Commercial Banking business segment (€ millions)

INCOME/EXPENSES	1/1–30/6/2019	1/1–30/6/2018
Net interest	732	728
Dividends and other income from equity investments	2	—
Net fees and commissions	362	402
Net trading income	10	35
Net other expenses/income	(18)	(11)
OPERATING INCOME	**1,088**	**1,154**
Payroll costs	(300)	(300)
Other administrative expenses	(513)	(539)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(6)	(6)
Operating costs	**(819)**	**(845)**
OPERATING PROFIT	**269**	**309**
Net write-downs of loans and provisions for guarantees and commitments	(30)	(91)
NET OPERATING PROFIT	**239**	**218**
Provisions for risks and charges	86	(104)
Restructuring costs	—	—
Net income from investments	11	11
PROFIT BEFORE TAX	**336**	**125**
Income tax for the period	(135)	(92)
PROFIT AFTER TAX	**201**	**33**
Impairment on goodwill	—	—
CONSOLIDATED PROFIT	**201**	**33**
attributable to the shareholder of UniCredit Bank AG	201	33
attributable to minorities	—	—
Cost-income ratio in %[1]	75.3	73.2

1 Ratio of operating costs to operating income.

In the first half of 2019, the Commercial Banking business segment generated an operating profit (before net write-downs of loans and provisions for guarantees and commitments) of €269 million, which is a significant 12.9% or €40 million lower than the previous-year period.

At €1,088 million, operating income fell slightly by €66 million, or 5.7%, compared with the previous-year period (€1,154 million). Despite the still extremely low level of interest rates, net interest of €732 million contained in operating income was marginally above the previous year's comparative figure of €728 million. This positive development trend was supported in the retail banking business by a slight rise in real estate financing (up 2%), a strong increase in consumer lending activities (up 4%) and, above all, a good increase in the lending business in corporate customer activities. The customer deposit business continued to be weighed down by the persistently ultra-low interest rates.

Compared with the previous-year period, net fees and commissions fell, also due to changes in accounting methods, by €40 million, or 10.0%, to €362 million and net trading income by a sharp €25 million, or 71.4%, to €10 million. The fall in net trading income was mainly due to negative effects of the change in the credit value adjustment of interest rate derivatives with corporate clients. Net other expenses/income totalled €18 million in the first half of 2019. The increase in this expense compared with the previous-year period (€7 million) is attributable to a higher charge for the European bank levy and falling profit contributions from our WealthCap subsidiary. Dividends and other income from equity investments contributed €2 million to operating income in the first half of 2019 (previous-year period: €0 million).

As expected, a reduction of 3.1%, or €26 million, to €819 million was achieved in operating costs in the first half of 2019. This is attributable to lower other administrative expenses, which fell by 4.8%, or €26 million, to €513 million compared with the previous-year period. Among other things, this decline is due to lower expenses for deposit guarantee schemes and lower internal charges from other service units of the Bank, for example for IT and payment transaction expenses.

The cost-income ratio increased slightly to 75.3% in the current reporting period compared with 73.2% in the first half of 2018 as a result of the declining earnings trend.

In the first half of 2019, there was a net addition of €30 million to net write-downs of loans and provisions for guarantees and commitments compared with €91 million in the previous-year period.

There was a strong increase of €21 million, or 9.6%, to €239 million in net operating profit in the first half of 2019 (previous-year period: €218 million). The decrease in net write-downs of loans and provisions for guarantees and commitments only partly offset the lower operating income.

In the first half of 2019, there was net income of €86 million from the reversal of provisions after additions of €104 million in the previous-year period. Towards the end of the first quarter of 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 are lower than the provisions set up for it, which means that the excess was able to be reversed. The net additions to provisions for risks and charges in the first half of 2018 are largely due to the increase in provisions for this matter.

At €11 million, net income from investments equals the figure in the previous-year period.

Overall, the Commercial Banking business segment generated a profit before tax of €336 million in the first half of 2019, which is significantly higher than the previous-year figure of €125 million.

The income tax expense for the reporting period increased substantially by €43 million to €135 million compared with the first half of 2018.

The Commercial Banking business segment reported a profit after tax of €201 million for the first half of 2019, which is significantly above the previous year's comparative figure of €33 million.

Segment Reporting (Continued)

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

INCOME/EXPENSES	1/1–30/6/2019	1/1–30/6/2018
Net interest	401	519
Dividends and other income from equity investments	—	1
Net fees and commissions	130	141
Net trading income	320	286
Net other expenses/income	41	74
OPERATING INCOME	**892**	**1,021**
Payroll costs	(198)	(191)
Other administrative expenses	(351)	(376)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(328)	(58)
Operating costs	**(877)**	**(625)**
OPERATING PROFIT	**15**	**396**
Net write-downs of loans and provisions for guarantees and commitments	(54)	164
NET OPERATING PROFIT	**(39)**	**560**
Provisions for risks and charges	195	(236)
Restructuring costs	—	(1)
Net income from investments	18	—
PROFIT BEFORE TAX	**174**	**323**
Income tax for the period	(117)	(210)
PROFIT AFTER TAX	**57**	**113**
Impairment on goodwill	—	—
CONSOLIDATED PROFIT	**57**	**113**
attributable to the shareholder of UniCredit Bank AG	58	113
attributable to minorities	—	—
Cost-income ratio in %[1]	98.3	61.2

1 Ratio of operating costs to operating income.

In the first half of 2019, the Corporate & Investment Banking business segment generated operating income of €892 million and was thus unable to match the year-ago figure of €1,021 million.

The primary cause of this development is the decline in net interest compared with the previous-year period, which is down by 22.7%, or €118 million, to €401 million. This is primarily attributable to the persistently low interest rate environment. In addition, there was a significant decline in trading-induced interest compared with the previous-year period in connection with CIB's current trading strategy.

At €130 million, net fees and commissions were €11 million, or 7.8%, lower than in the previous-year period. On the one hand, this is due to less demand by companies for equity or borrowings using capital market products, such as bonds or share issues, whereby it should be taken into account that in the first half of 2018 fee and commission income benefited from larger capital measures, and on the other hand, it is attributable to lower loan commissions and advisory fees.

Net other expenses/income fell significantly to €41 million (previous-year period: €74 million) whereby the previous-year total includes a positive non-recurring effect in connection with the offshore wind farm. There were no dividends and other income from equity investments in the first half of 2019 (previous-year period: €1 million).

By contrast, net trading income was up compared with the previous-year period, increasing a significant €34 million, or 11.9%, to €320 million. This increase is due in particular to the areas of fixed income products as well as equity and commodity products. The key drivers in this context are a positive development in the customer business coupled with an improved market environment. By contrast, valuation adjustments, which primarily include credit value adjustments and funding value adjustments, made a negative contribution to net trading income.

Operating costs rose a sharp €252 million, or 40.3%, to €877 million compared with the previous-year period. This is mainly due to unplanned depreciation of €259 million on the offshore wind farm, which was classified as IFRS 5. The carrying amount is thus to be written down to the expected sales proceeds. Furthermore, payroll costs rose slightly by €7 million, or 3.7%, to €198 million on account of a non-recurring effect in the previous year whereas other administrative expenses fell by €25 million, or 6.6%, to €351 million.

The cost-income ratio rose from 61.2% in the first half of 2018 to 98.3% in the reporting period on account of the slight decline in the earnings trend and the unplanned depreciation. Operating profit fell by €381 million, or 96.2%, to €15 million.

In the first half of 2019, there was a net addition of €54 million in net write-downs of loans and provisions for guarantees and commitments after a net reversal of €164 million was reported in the previous-year period.

In the first half of 2019, there was net income of €195 million from the reversal of provisions for risks and charges after net additions of €236 million in the previous-year period. Towards the end of the first quarter of 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 are lower than the provisions set up for it, which means that the excess was able to be reversed. Net additions to provisions for risks and charges in the first half of 2018 are largely due to the increase in provisions for this matter.

Net income from investments totalled €18 million in the first half of 2019, after no such contributions to profits was recorded in the previous-year period.

The Corporate & Investment Banking business segment generated profit before tax of €174 million in the first half of 2019, which is thus significantly lower than the previous-year figure of €323 million.

The income tax expense for the reporting period fell by €93 million, or 44.3%, to €117 million compared with the first half of 2018.

The Corporate & Investment Banking business segment reports a profit after tax of €57 million for the first half of 2019, which, however, is significantly lower than the previous-year figure of €113 million.

Segment Reporting (Continued)

Development of the Group Corporate Centre business segment

(€ millions)

INCOME/EXPENSES	1/1–30/6/2019	1/1–30/6/2018
Net interest	32	13
Dividends and other income from equity investments	—	—
Net fees and commissions	(2)	(5)
Net trading income	1	16
Net other expenses/income	35	43
OPERATING INCOME	**66**	**67**
Payroll costs	(175)	(187)
Other administrative expenses	163	160
Amortisation, depreciation and impairment losses on intangible and tangible assets	(5)	(14)
Operating costs	**(17)**	**(41)**
OPERATING PROFIT	**49**	**26**
Net write-downs of loans and provisions for guarantees and commitments	4	28
NET OPERATING PROFIT	**53**	**54**
Provisions for risks and charges	7	1
Restructuring costs	—	—
Net income from investments	377	101
PROFIT BEFORE TAX	**437**	**156**
Income tax for the period	(114)	(36)
PROFIT AFTER TAX	**323**	**120**
Impairment on goodwill	—	—
CONSOLIDATED PROFIT	**323**	**120**
attributable to the shareholder of UniCredit Bank AG	322	119
attributable to minorities	1	1
Cost-income ratio in %[1]	25.8	61.2

1 Ratio of operating costs to operating income.

In the reporting period, the Group Corporate Centre business segment generated operating income of €66 million, therefore falling slightly by €1 million, or 1%, compared with the previous-year period.

In the first half of 2019, net interest improved by €19 million to €32 million after €13 million in the previous-year period. This increase is primarily due to asset/liability management. There were no dividends and other income from equity investments in the reporting or previous-year period. Net fees and commissions were up by €3 million compared with the first half of 2018 and report a commission expense of €2 million for the current reporting period. Net trading income fell by €15 million, or 93.8%, from €16 million in the previous-year period to €1 million in the first half of 2019 on account of IFRS 9 fair value adjustments. With a decrease in operating costs of €24 million or 58.5% compared with the previous-year period, the operating profit amounted to €49 million after €26 million in the first half of 2018.

There was a net reversal of €4 million in net write-downs of loans and provisions for guarantees and commitments in the reporting period and of €28 million in the previous-year period, representing a decline of 85.7%. In the first half of 2019, net operating profit thus totalled €53 million after €54 million in the first half of 2018.

At €377 million, net income from investments was significantly higher compared with the previous-year period (€101 million). This mainly relates to the income of €364 million reported in the first half of 2019 from the sale of the properties recognised in the balance-sheet item "Non-current assets or disposal groups held for sale" which were held by our companies Acis Immobilien und Projektentwicklungs GmbH & Co. Oberbaum City KG and NF Objekte Berlin GmbH.

Particularly on account of the net income from investments, the profit before tax of the Group Corporate Centre business segment, at €437 million in the reporting period, was significantly higher than the profit before tax of €156 million in the first half of 2018. For the reporting period, the income tax expense increased significantly over the first half of 2018, by €78 million to €114 million.

The Group Corporate Centre business segment reports a profit after tax of €323 million for the first half of 2019, which very clearly exceeds the comparable figure of €120 million for the previous-year period by €203 million. There were no expenses for the impairment of goodwill.

As a result of operating income remaining at the previous year's level, lower operating costs and the net income from investments, there was a substantial improvement in the cost-income ratio to 25.8% in the reporting period compared with 61.2% in the first half of 2018.

Segment Reporting (Continued)

Development of the Other business segment

(€ millions)

INCOME/EXPENSES	1/1–30/6/2019	1/1–30/6/2018
Net interest	(3)	(2)
Dividends and other income from equity investments	—	—
Net fees and commissions	—	—
Net trading income	5	1
Net other expenses/income	34	36
OPERATING INCOME	**36**	**35**
Payroll costs	(50)	(57)
Other administrative expenses	75	63
Amortisation, depreciation and impairment losses on intangible and tangible assets	(44)	(43)
Operating costs	**(19)**	**(37)**
OPERATING PROFIT	**17**	**(2)**
Net write-downs of loans and provisions for guarantees and commitments	—	—
NET OPERATING PROFIT	**17**	**(2)**
Provisions for risks and charges	—	—
Restructuring costs	—	—
Net income from investments	11	28
PROFIT BEFORE TAX	**28**	**26**
Income tax for the period	(5)	(10)
PROFIT AFTER TAX	**23**	**16**
Impairment on goodwill	—	—
CONSOLIDATED PROFIT	**23**	**16**
attributable to the shareholder of UniCredit Bank AG	22	16
attributable to minorities	—	—
Cost-income ratio in %[1]	52.8	105.7

1 Ratio of operating costs to operating income.

The Other business segment, which is shown separately for the first time in the reporting period, generated operating income of €36 million in the first half of 2019 and is thus €1 million or 2.9% higher than the previous year's figure of €35 million.

The change in operating costs by €18 million, or 48.6%, to €19 million is largely due to an increase of €12 million, or 19%, to €75 million in other administrative expenses in the first half of 2019 compared with €63 million in the previous-year period. As expected, payroll costs fell by €7 million to €50 million. Amortisation, depreciation and impairment losses on intangible and tangible assets come to €44 million in the reporting period and are thus marginally higher at 2.3% compared to €43 million in the previous-year period.

On account of the decline in operating costs, the Other business segment generated an operating profit of €17 million in the reporting period after a loss of €2 million in the previous-year period.

Together with other operating income at 2018 levels, the cost-income ratio improved in the reporting period to 52.8% compared to 105.7% in the first half of 2018.

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 €17 million in the reporting period.

In the current reporting period as in the first half of 2018, no expenses arose in the items "Provisions for risks and charges" and "Restructuring costs".

Net income from investments posted a year-on-year decline from €17 million to €11 million.

Overall, the Other business segment generated profit before tax of €28 million in the first half of 2019, a 7.7% year-on-year rise of €2 million.

Income tax for the reporting period fell by 50% to €5 million compared to the first half of 2018.

For the first half of 2019, the Other business segment reported profit after tax of €23 million, representing a substantial 43.8% rise of €7 million compared to €16 million in the first half of 2018.

Segment Reporting (Continued)

5 Balance sheet figures, broken down by business segment

(€ millions)

	COMMERCIAL BANKING	CORPORATE & INVESTMENT BANKING	GROUP CORPORATE CENTRE	OTHER	CONSOLIDATION	HVB GROUP
Loans and receivables with banks (at cost)						
30/6/2019	417	31,563	53	(136)	112	32,009
31/12/2018	—	—	—	—	—	—
Loans and receivables with customers (at cost)[1]						
30/6/2019	86,745	42,839	1,035	(2,358)	—	128,261
31/12/2018	83,502	42,208	458	(2,542)	—	123,626
Goodwill						
30/6/2019	130	—	—	—	—	130
31/12/2018	130	—	—	—	—	130
Deposits from customers						
30/6/2019	88,361	29,659	1,525	(165)	116	119,496
31/12/2018	90,299	29,234	1,623	(235)	117	121,038
Risk-weighted assets compliant						
with Basel III (including equivalents for						
market risk and operational risk)						
30/6/2019	30,818	45,926	5,322	(510)	2,343	83,899
31/12/2018	31,501	44,521	5,077	(515)	2,008	82,592

1 The loans and receivables with customers do not contain any securities holdings for internal management purposes.

Notes to the Income Statement

6 Net interest

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Interest income	1,813	1,890
from financial assets at cost	1,446	1,445
from financial assets at FVTOCI	14	6
from financial assets at FVTPL and hedging derivatives	224	301
from financial assets held for trading	83	87
other interest income	46	51
Negative interest on financial assets	(68)	(76)
Interest expense	(709)	(704)
from financial liabilities at cost	(493)	(455)
thereof: from lease liabilities	(2)	n/a
from financial liabilities at FVTPL and hedging derivatives	(40)	(44)
from financial liabilities held for trading	(169)	(188)
other interest expense	(7)	(17)
Negative interest on financial liabilities	113	134
Total	**1,149**	**1,244**

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

For forward exchange transactions, the difference between the spot and forward rates (swap rate) must be accrued or deferred and is included in net interest in 2019 for the first time. In the previous year, this accrual or deferral was reported under net trading income for existing forward exchange transactions in the foreign banking book. Accordingly, interest income of €25 million and interest expense of €66 million from the accrual or deferral of swap rates were recognised in the first half of 2019, while a net loss of €36 million on these transactions from the accrual or deferral of swap rates was shown under net trading income in the first half of 2018. The previous year’s figures were not restated for materiality reasons.

Net interest attributable to related parties

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Non-consolidated affiliated companies	14	21
of which:		
UniCredit S.p.A.	6	8
Sister companies	8	13
Subsidiaries	—	—
Joint ventures	4	2
Associated companies	1	13
Other participating interests	7	6
Total	**26**	**42**

Notes to the Income Statement (Continued)

7 Dividends and other income from equity investments

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Dividends and other similar income	2	8
Companies accounted for using the equity method	—	1
Total	**2**	**9**

8 Net fees and commissions

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Fee and commission income	641	677
Securities services for clients	276	316
Payment transactions	145	144
Loan business	78	85
Guarantees	62	60
Distribution of third party products	54	40
Other commission income	26	32
Fee and commission expense	(153)	(134)
Securities services for clients	(77)	(83)
Payment transactions	(34)	(13)
Loan business	(9)	(3)
Guarantees	(2)	(2)
Distribution of third party products	—	—
Other commission expense	(31)	(33)
Net fees and commissions	**488**	**543**

With regard to the increase in provision expenses for payment transactions, it should be noted that the disclosure of expenses for the purchase of certain payment transactions was changed. These expenses of €21 million were recorded under commission expense in the first half of 2019 instead of under operating costs, whereas €21 million for the purchase of these services was recorded under operating costs in the first half of 2018. For reasons of materiality, the previous year's figures were not restated.

Net fees and commissions from related parties

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Non-consolidated affiliated companies	(14)	9
of which:		
UniCredit S.p.A.	(2)	7
Sister companies	(12)	—
Subsidiaries	—	2
Joint ventures	—	—
Associated companies	—	—
Other participating interests	—	—
Total	**(14)**	**9**

9 Net trading income

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Net gains on financial assets held for trading[1]	338	378
Total	**338**	**378**

1 Including dividends on financial assets held for trading.

The net gains on holdings at fair value through profit or loss generally only contain the changes in fair value disclosed in the income statement. For hedged forward exchange transactions in the non-trading portfolio used for liquidity management of foreign currency holdings, the swap rate is accrued or deferred over the remaining term of the transactions and reported in net interest. In the previous year, this accrual or deferral was reported under net trading income for existing forward exchange transactions in the banking book outside of Germany. Accordingly, interest income of €25 million and interest expense of €66 million from the accrual or deferral of swap rates were recognised in the first half of 2019, while a net loss of €36 million on these transactions from the accrual or deferral of swap rates was shown under net trading income in the first half of 2018. The previous year's figures were not restated for materiality reasons.

The interest income from trading portfolios is normally disclosed under net interest. To ensure that the full contribution of these activities to profits is disclosed, the interest cash flows are carried in net trading income for the interest rate swap trading book, which exclusively contains interest rate derivatives.

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Financial assets mandatorily at FVTPL	(11)	(20)
Financial liabilities designated at FVTPL	(38)	(53)
Derecognition from OCI	5	1
Effects arising from hedge accounting	26	19
Fair value equity	20	14
Total	**2**	**(39)**

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Fair value hedges	26	19
Changes in fair value of hedged items	(592)	69
Portfolio fair value hedges	(783)	41
Micro fair value hedges	191	28
Changes in fair value of hedging instruments	618	(50)
Portfolio fair value hedges	809	(22)
Micro fair value hedges	(191)	(28)
Cash flow hedges	—	—
Net gains/(losses) of cash flow hedges (only ineffective part)	—	—
Total	**26**	**19**

Notes to the Income Statement (Continued)

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 AMOUNT		CHANGE IN FAIR VALUE USED TO RECOGNISE AN INEFFECTIVENESS IN THE HEDGE FOR THE PERIOD
	LESS THAN 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	
Balance at 30/6/2019								
Nominal								
Hedged items	450	4,889	3,316					
Hedging transactions	450	4,889	3,316					
Interest rate sensitivities in BPV								
Hedged items	—	(2)	(2)					
Hedging transactions	—	2	2					
Balance sheet values								
Hedged items				224		8,481		
Hedging transactions						—	350	
Hedge result								—
Hedged items								191
Hedging transactions								(191)
Balance at 31/12/2018								
Nominal								
Hedged items	2,300	2,941	2,038					
Hedging transactions	2,300	2,941	2,038					
Interest rate sensitivities in BPV								
Hedged items	—	(1)	(1)					
Hedging transactions	—	1	1					
Balance sheet values								
Hedged items				49		7,370		
Hedging transactions						7	96	
Hedge result								—
Hedged items								54
Hedging transactions								(54)

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

Portfolio fair value hedge

(€ millions)

	REMAINING TERM			CUMULATIVE AMOUNT OF THE HEDGE-RELATED ADJUSTMENT TO THE FAIR VALUE INCLUDED IN THE CARRYING AMOUNT OF THE HEDGED ITEM RECOGNISED IN THE BALANCE SHEET		CARRYING AMOUNT		CHANGE IN FAIR VALUE USED TO RECOGNISE AN INEFFECTIVENESS IN THE HEDGE FOR THE PERIOD
	LESS THAN 1 YEAR	1 YEAR TO 5 YEARS	MORE THAN 5 YEARS	ASSETS	LIABILITIES	ASSETS	LIABILITIES	
Balance at 30/6/2019								
Interest rate sensitivities in BPV								
Hedged items								
EUR	1	6	11					
USD	—	—	—					
CHF	—	—	—					
GBP	—	—	—					
Hedging transactions								
EUR	(1)	(6)	(11)					
USD	—	—	—					
CHF	—	—	—					
GBP	—	—	—					
Balance sheet values								
Hedged items				49	2,026			
Hedging transactions						286	531	
Hedge result								26
Hedged items								(783)
Hedging transactions								809
Balance at 31/12/2018								
Interest rate sensitivities in BPV								
Hedged items								
EUR	—	8	10					
USD	—	—	—					
CHF	—	—	—					
GBP	—	—	—					
Hedging transactions								
EUR	—	(8)	(10)					
USD	—	—	—					
CHF	—	—	—					
GBP	—	—	—					
Balance sheet values								
Hedged items				36	1,210			
Hedging transactions						269	502	
Hedge result								13
Hedged items								(33)
Hedging transactions								46

Notes to the Income Statement (Continued)

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

In line with the standard bank risk management procedures for the hedging of fixed interest rate risks, the interest rate risks entailed in the hedged items are managed on a cross-item basis in the portfolio fair value hedge. For this purpose, the interest-relevant cash flows of the hedged items are allocated separately by currency to maturity buckets and the net position is determined. The interest rate hedging derivatives concluded thus relate to net interest rate risk positions across several items in the respective maturity buckets and not to specific hedged items. As a hedged item may thus have different effects in the respective maturity bucket, the effects of hedge accounting are presented by reference to interest sensitivity. The statement of interest 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%).

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Loans and receivables (performing)	4	9
Buy-backs of securities issued	1	(1)
Promissory notes (assets side)	—	9
Total	**5**	**17**

12 Net other expenses/income

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Other income	657	406
Disposal of land and buildings	4	1
Rental income	56	66
Valuation/disposals of investment properties	396	110
Other	201	229
Other expenses	(166)	(175)
Disposal of land and buildings	—	—
Valuation/disposals of investment properties	(1)	—
Expenses of investment properties	—	(1)
Bank levy	(104)	(93)
Other	(61)	(81)
Total	**491**	**231**

Other income includes rental income of €77 million from investment properties and mixed usage buildings (previous-year period: €89 million). Current operating expenses (including repairs and maintenance) directly allocable to investment properties and current expenses from mixed usage buildings of €21 million (previous-year period: €23 million) are netted with the other income.

Net other expenses/income contains income of €139 million (previous year: €133 million) in the item "Other" and expenses of €35 million (previous year: €35 million) in "Other" in connection with the BARD Offshore 1 wind farm.

The item "Valuation/disposals of investment properties" includes income of €365 million from the sale of the properties held by our companies Acis Immobilien und Projektentwicklungs GmbH & Co. Oberbaum City KG and NF Objekte Berlin GmbH, which are reported in the balance sheet item "Non-current assets or disposal groups held for sale".

Net other expenses/income attributable to related parties

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Non-consolidated affiliated companies	44	36
of which:		
UniCredit S.p.A.	6	5
Sister companies	38	31
Joint ventures	—	—
Associated companies	—	—
Other participating interests	—	—
Total	**44**	**36**

13 Operating costs

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Payroll costs	(723)	(735)
Other administrative expenses	(617)	(722)
Amortisation, depreciation and impairment losses on intangible and tangible assets	(383)	(113)
Total	**(1,723)**	**(1,570)**

The decline in other administrative costs must take into consideration that the recognition of expenses for the purchase of certain payment transaction services was adjusted. These expenses of €21 million were reported under commission expense in the first half of 2019 instead of operating costs, whereas expenses of €21 million for the purchase of these services in the first half of 2018 were recorded as operating costs. The previous year's figures were not restated for materiality reasons.

With regard to amortisation, depreciation and impairment losses on intangible and tangible assets, it must be noted that impairments of €259 million were recognised in the item "Non-current assets or disposal groups held for sale" in relation to the reclassification of the Offshore 1 wind farm.

Operating costs of related parties

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Non-consolidated affiliated companies	(311)	(350)
of which:		
UniCredit S.p.A.	(8)	(8)
Sister companies	(303)	(342)
Joint ventures	—	—
Associated companies	—	—
Other participating interests	—	—
Total	**(311)**	**(350)**

Notes to the Income Statement (Continued)

14 Credit impairment losses IFRS 9

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Additions	(438)	(446)
Allowances for losses on loans and receivables at cost	(335)	(374)
Allowances for losses on loans and receivables at FVTOCI	—	—
Allowances for losses on guarantees and indemnities	(103)	(72)
Releases	340	543
Allowances for losses on loans and receivables at cost	250	446
Allowances for losses on loans and receivables at FVTOCI	—	—
Allowances for losses on guarantees and indemnities	90	97
Gains/(losses) from not substantial modification	1	—
Recoveries from write-offs of loans and receivables	17	16
Gains/(losses) on the disposal of impaired loans and receivables	—	(12)
Total	**(80)**	**101**

Credit impairment losses IFRS 9 attributable to related parties

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

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Non-consolidated affiliated companies	—	—
of which:		
UniCredit S.p.A.	—	—
Sister companies	—	—
Joint ventures	—	—
Associated companies	—	4
Other participating interests	—	—
Total	**—**	**4**

15 Provisions for risks and charges

In the first half of 2019, there was income of €288 million from the reversal of provisions for risks and charges after net additions of €339 million in the previous-year period. In April of 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 are lower than the provisions set up for it, which means that the amount in excess was able to be reversed. The net additions to provisions for risks and charges in the first half of 2018 are largely due to the increase in provisions for this matter.

16 Net gains/losses on disposals of investments

(€ millions)

	1/1–30/6/2019	1/1–30/6/2018
Shares in affiliated companies	—	28
Disposal of companies accounted for using the equity method	15	—
Writedowns	(2)	—
Total	**13**	**28**

The disposal of companies accounted for using the equity method contains the gain of €15 million on the sale of our associated company SwanCap Partners GmbH, Munich.

In the previous year, shares in affiliated companies included the gains of €28 million on the sale of our subsidiary Mobility Concept GmbH, Oberhaching.

17 Earnings per share

	1/1–30/6/2019	1/1–30/6/2018
Consolidated profit attributable to the shareholder (€ millions)	602	261
Average number of shares	802,383,672	802,383,672
Earnings per share (€) (undiluted and diluted)	0.75	0.33

Notes to the Balance Sheet

18 Financial assets held for trading

(€ millions)

	30/6/2019	31/12/2018
Balance-sheet assets	24,416	26,694
Fixed-income securities	7,590	9,187
Equity instruments	7,442	7,520
Other financial assets held for trading	9,384	9,987
Positive fair value from derivative financial instruments	49,323	42,263
Total	**73,739**	**68,957**

The financial assets held for trading include €133 million (previous year: €140 million) in subordinated assets.

Financial assets held for trading of related parties

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

(€ millions)

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	13,556	10,786
of which:		
UniCredit S.p.A.	9,223	7,534
Sister companies[1]	4,333	3,252
Joint ventures	135	86
Associated companies	1,103	1,007
Other participating interests	5	4
Total	**14,799**	**11,883**

1 Mostly derivative transactions involving UniCredit Bank Austria AG.

19 Financial assets at FVTPL

(€ millions)

	30/6/2019	31/12/2018
Fixed-income securities	13,962	15,135
Equity instruments	264	242
Loans and promissory notes	1,397	1,243
Other	71	63
Total	**15,694**	**16,683**

Financial assets at FVTPL include an amount of €36 million in subordinated loans and receivables in the reporting year (previous year: €399 million).

In the reporting year and in the previous year the financial assets at FVTPL do not include any loans and receivables past due.

20 Financial assets at FVTOCI

(€ millions)

	30/6/2019	31/12/2018
Fixed-income securities	8,481	7,370
Total	**8,481**	**7,370**

Development loss allowance

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2019	**7,370**	**—**	**—**	**—**	**7,370**
Transfers to another stage due to					
deterioration of credit quality	—	—	—	—	—
Transfers to another stage due to					
improvement of credit quality	—	—	—	—	—
Changes due to modification that did					
not result in derecognition	—	—	—	—	—
Changes within the stage (net)[1]	1,111	—	—	—	1,111
Derecognition (due to incollectibility)	—	—	—	—	—
Other changes	—	—	—	—	—
Balance at 30/6/2019	**8,481**	**—**	**—**	**—**	**8,481**
Balance at 1/1/2018	**6,147**	**—**	**—**	**—**	**6,147**
Transfers to another stage due to					
deterioration of credit quality	—	—	—	—	—
Transfers to another stage due to					
improvement of credit quality	—	—	—	—	—
Changes due to modification that did					
not result in derecognition	—	—	—	—	—
Changes within the stage (net)[1]	1,223	—	—	—	1,223
Derecognition (due to incollectibility)	—	—	—	—	—
Other changes	—	—	—	—	—
Balance at 31/12/2018	**7,370**	**—**	**—**	**—**	**7,370**

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

No modifications to fixed-income securities were made in the reporting year, as also in the previous year.

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

Notes to the Balance Sheet (Continued)

21 Loans and receivables with banks (at cost)

(€ millions)

	30/6/2019	31/12/2018
Current accounts	1,783	2,192
Cash collateral and pledged credit balances	8,523	6,847
Reverse repos	16,085	17,261
Securities	1,302	1,342
Other loans to banks	5,573	6,006
Non-performing loans and receivables	—	—
Total	**33,266**	**33,648**

The other loans to banks consist mostly of term deposits and bonds.

The “Loans and receivables with banks (at cost)” include €2,000 in subordinated assets as at the reporting date and in the previous year.

Development of the gross carrying amounts (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2019	**33,191**	**464**	**40**	**—**	**33,695**
Change in balance within the stage					
(including additions from new business and disposals)	73	(423)	(35)	—	(385)
Transfers to another stage due to deterioration in credit quality	(70)	39	31	—	—
from stage 1 to stage 2	(39)	39	—	—	—
from stage 2 to stage 3	—	—	—	—	—
from stage 1 to stage 3	(31)	—	31	—	—
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 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 30/6/2019	**33,195**	**79**	**36**	**—**	**33,310**
Balance at 1/1/2018	**30,276**	**223**	**38**	**—**	**30,537**
Change in balance within the stage					
(including additions from new business and disposals)	2,729	427	2	—	3,158
Transfers to another stage due to deterioration in credit quality	(18)	18	—	—	—
from stage 1 to stage 2	(18)	18	—	—	—
from stage 2 to stage 3	—	—	—	—	—
from stage 1 to stage 3	—	—	—	—	—
Transfers to another stage due to improvement in credit quality	204	(204)	—	—	—
from stage 2 to stage 1	204	(204)	—	—	—
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	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 31/12/2018	**33,191**	**464**	**40**	**—**	**33,695**

Notes to the Balance Sheet (Continued)

Analysis of allowances

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2019	**6**	**1**	**40**	**—**	**47**
Addition due to new business	5	—	—	—	5
Change in balance within the same stage (netted)[1]	—	—	(4)	—	(4)
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	—	—	—	—	—
Change of model	—	—	—	—	—
Disposals (reversal due to disposal of receivables)	(4)	—	—	—	(4)
Disposals (utilisation of impairments)	—	—	—	—	—
Reversal of the discounted amount and receipt of					
interest claims previously not recognised in profit or loss	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 30/6/2019	**7**	**1**	**36**	**—**	**44**
Balance at 1/1/2018	**6**	**4**	**38**	**—**	**48**
Addition due to new business	5	—	—	—	5
Change in balance within the same stage (netted)[1]	(1)	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	—	—	—	—	—
Change of model	—	—	—	—	—
Disposals (reversal due to disposal of receivables)	(5)	(4)	—	—	(9)
Disposals (utilisation of impairments)	—	—	—	—	—
Reversal of the discounted amount and receipt of					
interest claims previously not recognised in profit or loss	—	—	—	—	—
Foreign currency movements and other changes	1	—	2	—	3
Balance at 31/12/2018	**6**	**1**	**40**	**—**	**47**

1 Transfers between the individual stages are also shown here (disposal at the previous stage, addition at the new stage).

Loans and receivables with related parties

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

(€ millions)

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	3,101	3,892
of which:		
UniCredit S.p.A.	2,046	2,871
Sister companies[1]	1,055	1,021
Joint ventures	49	112
Associated companies	39	16
Other participating interests	38	24
Total	**3,227**	**4,044**

1 Mainly UniCredit Bank Austria AG.

22 Loans and receivables with customers (at cost)

(€ millions)

	30/6/2019	31/12/2018
Current accounts	7,274	6,641
Cash collateral and pledged cash balances	3,043	2,652
Reverse repos	2,631	3,842
Mortgage loans	48,021	46,635
Receivables under finance leases	1,852	1,847
Securities	12,216	11,248
thereof: asset-backed securities (ABS)	8,798	8,266
Other loans and receivables	62,768	59,477
Non-performing loans and receivables	1,368	1,364
Total	**139,173**	**133,706**

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 €4,771 million (previous year: €4,282 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 reporting year, the loans and receivables with customers (at cost) include €33 million (previous year: €34 million) in subordinated assets.

Notes to the Balance Sheet (Continued)

Development of gross carrying amounts

(€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2019	**124,753**	**7,915**	**2,984**	**—**	**135,652**
Change in balance within the stage					
(including additions from new business and disposals)	7,766	(1,525)	(833)	—	5,408
Transfers to another stage due to deterioration in credit quality	(5,790)	5,009	781	—	—
from stage 1 to stage 2	(5,114)	5,114	—	—	—
from stage 2 to stage 3	—	(105)	105	—	—
from stage 1 to stage 3	(676)	—	676	—	—
Transfers to another stage due to improvement in credit quality	1,935	(1,913)	(22)	—	—
from stage 2 to stage 1	1,923	(1,923)	—	—	—
from stage 3 to stage 2	—	10	(10)	—	—
from stage 3 to stage 1	12	—	(12)	—	—
Increase reported directly in equity in gross carrying amounts					
for interest claims not recognised in profit or loss	—	—	40	—	40
Changes due to modification of assets, not leading to derecognition	—	—	—	—	—
Foreign currency movements and other changes	—	—	—	—	—
Balance at 30/6/2019	**128,664**	**9,486**	**2,950**	**—**	**141,100**
Balance at 1/1/2018	**112,514**	**6,818**	**3,874**	**—**	**123,206**
Change in balance within the stage					
(including additions from new business and disposals)	14,113	(458)	(1,286)	—	12,369
Transfers to another stage due to deterioration in credit quality	(4,215)	3,732	483	—	—
from stage 1 to stage 2	(3,873)	3,873	—	—	—
from stage 2 to stage 3	—	(141)	141	—	—
from stage 1 to stage 3	(342)	—	342	—	—
Transfers to another stage due to improvement in credit quality	2,341	(2,177)	(164)	—	—
from stage 2 to stage 1	2,293	(2,293)	—	—	—
from stage 3 to stage 2	—	116	(116)	—	—
from stage 3 to stage 1	48	—	(48)	—	—
Increase reported directly in equity in gross carrying amounts					
for interest claims not recognised in profit or loss	—	—	52	—	52
Changes due to modification of assets, not leading to derecognition	—	—	2	—	2
Foreign currency movements and other changes	—	—	23	—	23
Balance at 31/12/2018	**124,753**	**7,915**	**2,984**	**—**	**135,652**

Analysis of allowances (€ millions)

	STAGE 1	STAGE 2	STAGE 3	POCI	TOTAL
Balance at 1/1/2019	**139**	**187**	**1,620**	**—**	**1,946**
Addition due to new business	41	—	—	—	41
Change in balance within the same stage (netted)[1]	(21)	42	134	—	155
Increase in impairment reported directly in equity for					
interest claims not recognised in profit or loss	—	—	40	—	40
Changes due to modification of assets,					
not leading to derecognition	—	—	1	—	1
Change of model	—	—	—	—	—
Disposals (reversal due to disposal of receivables)	(26)	(18)	(88)	—	(132)
Disposals (utilisation of impairments)	—	—	(107)	—	(107)
Reversal of the discounted amount and receipt of					
interest claims previously not recognised in profit or loss	—	—	(15)	—	(15)
Foreign currency movements and other changes	1	(1)	(2)	—	(2)
Balance at 30/6/2019	**134**	**210**	**1,583**	**—**	**1,927**
Balance at 1/1/2018	**140**	**181**	**1,953**	**—**	**2,274**
Addition due to new business	109	—	—	—	109
Change in balance within the same stage (netted)[1]	(42)	56	361	1	376
Increase in impairment reported directly in equity for					
interest claims not recognised in profit or loss	—	—	52	—	52
Changes due to modification of assets,					
not leading to derecognition	—	—	2	—	2
Change of model	—	—	—	—	—
Disposals (reversal due to disposal of receivables)	(55)	(61)	(405)	—	(521)
Disposals (utilisation of impairments)	—	—	(271)	(1)	(272)
Reversal of the discounted amount and receipt of					
interest claims previously not recognised in profit or loss	—	—	(46)	—	(46)
Foreign currency movements and other changes	(13)	11	(26)	—	(28)
Balance at 31/12/2018	**139**	**187**	**1,620**	**—**	**1,946**

1 Transfers between the individual stages are also shown here (disposal at the previous stage, addition at the new stage).

Notes to the Balance Sheet (Continued)

Loans and receivables with related parties

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

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	3	6
of which:		
Sister companies	2	3
Subsidiaries	1	3
Joint ventures	13	15
Associated companies	105	115
Other participating interests	455	473
Total	**576**	**609**

23 Hedging derivatives

(€ millions)

	30/6/2019	31/12/2018
Micro fair value hedge	—	7
Fair value hedge portfolio[1]	286	269
Total	**286**	**276**

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

24 Investments in associates and joint ventures

(€ millions)

	30/6/2019	31/12/2018
Associated companies accounted for using the equity method	10	23
of which: goodwill	—	—
Joint ventures accounted for using the equity method	—	—
Total	**10**	**23**

25 Property, plant and equipment

(€ millions)

	30/6/2019	31/12/2018
Land and buildings[1]	707	922
Plant and office equipment[1]	317	329
Right of use assets (leases)	289	n/a
thereof: land and buildings	278	n/a
Other property, plant and equipment	—	1,238
Total	**1,313**	**2,489**

1 Including leased assets of €461 million (previous year: €525 million).

Other property, plant and equipment mainly contains the BARD Offshore 1 wind farm which belongs to the Ocean Breeze Energy GmbH & Co. KG subsidiary. This was reclassified to the item "Non-current assets or disposal groups held for sale" with effect from 30 June 2019.

26 Non-current assets or disposal groups held for sale

(€ millions)

	30/6/2019	31/12/2018
Cash and cash balances	—	—
Financial assets at FVTPL	—	—
Financial assets at FVTOCI	—	—
Loans and receivables with banks (at cost)	—	—
Loans and receivables with customers (at cost)	—	—
Investments in associates and joint ventures	11	9
Property, plant and equipment	1,151	—
Investment properties	645	733
Tax assets	4	—
Other assets	58	—
Total	**1,869**	**742**

As at 30 June 2019, property, plant and equipment totalling €1,151 million was designated as non-current assets or disposal groups held for sale. This relates to the planned disposal of the subsidiary Ocean Breeze Energy GmbH & Co. KG, Bremen, which operates a wind farm as well as other land and buildings. Non-strategic real estate held for sale is reported under investment properties. Furthermore, the carrying amount of an associate company accounted for using the equity method has been reclassified according to IFRS 5, the disposal of which is planned. The disposals planned for the first half of 2019 (investment properties with carrying amounts totalling €89 million and the disposal of the SwanCap Partners GmbH, Munich, an equity investment accounted for using the equity method) have been completed.

The disposal of investment properties classified as IFRS 5 as at 31 December 2018 is still planned for the second half of 2019. The disposal of the investment properties newly classified as IFRS 5 is definitely planned within the next 12 months, although it cannot be excluded that some of these properties may already be disposed of in the second half of 2019.

At 30 June 2019, allowances totalling €261 million were to be recorded in relation to the non-current assets or disposal groups which were classified for the first time as held for sale and were mostly attributable to the assets of Ocean Breeze Energy GmbH & Co. KG, Bremen. No valuation effects were recorded in the previous year.

Notes to the Balance Sheet (Continued)

27 Deposits from banks

(€ millions)

	30/6/2019	31/12/2018
Deposits from central banks	19,565	16,886
Deposits from banks	46,854	46,057
Current accounts	3,242	2,691
Cash collateral and pledged credit balances	8,938	9,289
Repos	17,419	16,484
Term deposits	4,151	4,772
Other liabilities	13,104	12,821
Total	**66,419**	**62,943**

Amounts owed to related parties

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

(€ millions)

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	5,299	6,103
of which:		
UniCredit S.p.A.	2,373	2,626
Sister companies[1]	2,926	3,477
Joint ventures	4	19
Associated companies	68	79
Other participating interests	21	23
Total	**5,392**	**6,224**

1 The largest single item relates to UniCredit Bank Austria AG.

28 Deposits from customers

(€ millions)

	30/6/2019	31/12/2018
Current accounts	76,033	76,334
Cash collateral and pledged credit balances	5,708	3,948
Savings deposits	13,652	13,659
Repos	2,550	6,196
Term deposits	19,075	18,075
Promissory notes	1,502	1,638
Lease liabilities	317	n/a
Other liabilities	976	1,188
Total	**119,813**	**121,038**

Leasing liabilities contain liabilities from operating leases that are recognised for the first time with the implementation of IFRS 16. These are shown here together with existing liabilities from finance leases.

Amounts owed to related parties

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

(€ millions)

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	328	241
of which:		
Sister companies	323	236
Subsidiaries	5	5
Joint ventures	1	4
Associated companies	—	1
Other participating interests	316	320
Total	**645**	**566**

29 Debt securities in issue

(€ millions)

	30/6/2019	31/12/2018
Bonds	24,074	21,746
of which:		
Registered mortgage Pfandbriefs	4,732	4,766
Registered public-sector Pfandbriefs	2,418	2,590
Mortgage Pfandbriefs	10,378	8,216
Public-sector Pfandbriefs	780	85
Registered bonds	3,282	3,146
Other securities	2,477	2,614
Total	**26,551**	**24,360**

Debt securities in issue, payable to related parties

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

(€ millions)

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	1,000	1,000
of which:		
UniCredit S.p.A.	1,000	1,000
Sister companies	—	—
Joint ventures	—	—
Associated companies	—	—
Other participating interests	—	—
Total	**1,000**	**1,000**

30 Financial liabilities held for trading

(€ millions)

	30/6/2019	31/12/2018
Negative fair values arising from derivative financial instruments	43,291	37,224
Other financial liabilities held for trading	7,650	10,881
Total	**50,941**	**48,105**

The negative fair values arising from derivative financial instruments are carried as financial liabilities held for trading purposes. Also included under other financial liabilities held for trading purposes are warrants, certificates and bonds issued by our trading department as well as delivery obligations arising from short sales of securities held for trading purposes.

31 Financial liabilities at FVTPL

The item contains exclusively own structured issues of €5,663 million (previous year: €5,152 million).

Notes to the Balance Sheet (Continued)

32 Hedging derivatives

(€ millions)

	30/6/2019	31/12/2018
Micro fair value hedge	350	96
Fair value hedge portfolio[1]	531	502
Total	**881**	**598**

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

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

The hedge adjustment of interest rate hedged receivables and liabilities in the fair value hedge portfolio total €2,026 million net (previous year: €1,210 million). The fair value of the netted fair value hedge portfolio derivatives represents a net comparable amount resulting from a move in the opposite direction.

34 Liabilities of disposal groups held for sale

(€ millions)

	30/6/2019	31/12/2018
Deposits from banks	—	—
Deposits from customers	16	—
Tax liabilities	7	—
Other liabilities	15	—
Provisions	45	—
Total	**83**	**—**

As at 30 June 2019, the liabilities of Ocean Breeze Energy GmbH & Co. KG, Bremen, were classified for the first time as liabilities of disposal groups held for sale.

35 Provisions

(€ millions)

	30/6/2019	31/12/2018
Provisions for pensions and similar obligations	1,179	801
Allowances for losses on guarantees and commitments and irrevocable credit commitments	227	214
Restructuring provisions	219	256
Other provisions	849	2,182
Payroll provisions	361	383
Provisions related to tax disputes (without income taxes)	35	28
Provisions for rental guarantees and dismantling obligations	102	154
Other provisions	351	1,617
Total	**2,474**	**3,453**

The fall in "Other provisions" was attributable mainly to the conclusion of proceedings concerning breaches of US economic sanctions. In April 2019, the Bank reached a settlement with the US and New York authorities to conclude the proceedings concerning breaches of US economic sanctions for the period 2002 – 2012. The amounts payable under the settlement are lower than the provisions set aside for this purpose, which means that the surplus amount was reversed.

Provisions for pensions and similar obligations

As at 30 June 2019, the provisions for pensions and similar obligations were remeasured on the basis of updated actuarial assumptions and market values of the plan assets. Compared with year-end 2018, pension provisions recognised in the consolidated balance sheet have increased by €378 million (+47.2%) to €1,179 million. The recognised pension provisions thus correspond to the net defined benefit liability from the defined benefit plans, resulting from netting the present value of the defined benefit obligation (DBO) of €5,347 million with the fair value of the plan assets of €4,168 million.

The key reason for the increase in the pension provisions was the lowering by 55 basis points of the discount rate (weighted average) to 1.55% (31 December 2018: 2.10%) due to the capital market developments in the first half of 2019. A reduced discount rate leads to a lower discounting of the liabilities from the defined benefit obligations and hence to an increase in the present value of liability.

The actuarial losses on the reporting date resulting from the calculation of the estimated present value of the defined benefit obligations, offset by the profit from the current market measurement of the plan assets (difference between standardised earnings and earnings actually realised), resulted in a negative total effect from remeasurements of €347 million, which was recognised immediately in shareholders' equity without affecting profit or loss and in other comprehensive income (OCI) within total comprehensive income.

36 Subordinated capital

The following table shows the breakdown of subordinated capital included in deposits from banks, deposits from customers and debt securities in issue:

(€ millions)

	30/6/2019	31/12/2018
Subordinated liabilities	411	493
Hybrid capital instruments	53	52
Total	**464**	**545**

Other Information

37 Events after the reporting period

At the beginning of August, HVB agreed on the sale of the companies Ocean Breeze Energy GmbH & Co. KG (and the subsidiaries held by this company) and Perikles 20092 Vermögensverwaltung GmbH. The assets and liabilities of the companies will be recognised in the items "Non-current assets or disposal groups held for sale" or "Liabilities of disposal groups held for sale".

38 Fair value hierarchy

The development of financial instruments measured at fair value and recognised at fair value in the balance sheet is 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 an active market. 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 €248 million (previous year: €180 million) have been transferred between Level 1 and Level 2. At the same time, financial assets or liabilities of €1,593 million (previous year: €2,253 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	—	73
	Transfer from Level 2	97	—
Financial assets at FVTPL			
	Transfer from Level 1	—	109
	Transfer from Level 2	1,416	—
Financial assets at FVTOCI			
	Transfer from Level 1	—	52
	Transfer from Level 2	69	—
Financial liabilities held for trading			
	Transfer from Level 1	—	14
	Transfer from Level 2	11	—
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 30 June).

Level 3 relates to assets or liabilities for which the fair value cannot be calculated exclusively on the basis of observable market data (non-observable input data). The amounts involved are stated in Level 2 if the impact of the non-observable input data on the determination of fair value is insignificant. Thus, the respective fair values also incorporate valuation parameters based on model assumptions. This includes derivatives and structured products that contain at least one “exotic” component, such as foreign currency or interest rate derivatives on illiquid currencies, derivatives without standard market terms, structured products with an illiquid underlying as the 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 are determined for these non-observable parameters and applied for valuation purposes, when the annual financial statements are prepared, reflecting the prevailing market conditions. 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 valuations for 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	0% – 213%
Equities	Market approach	Price	0% – 100%
Asset-backed securities (ABS)	DCF method	Credit spread curves	(47)bps – 1,385bps
		Residual value	0% – 100%
		Default rate	0% – 20%
		Prepayment rate	0% – 57%
Commodity/equity derivatives	Option price model	Commodity price volatility/equity volatility	1% – 174%
		Correlation between commodities/equities	(99)% – 99%
	DCF method	Dividend yields	0% – 21%
Interest rate derivatives	DCF method	Swap interest rate	(95)bps – 1,800bps
		Inflation swap interest rate	0bps – 360bps
	Option price model	Inflation volatility	0% – 8%
		Interest rate volatility	1% – 80%
		Correlation between interest rates	0% – 100%
Credit derivatives	Hazard rate model	Credit spread curves	0% – 132%
		Residual value	25% – 45%
Currency derivatives	DCF method	Yield curves	(5)% – 30%
	Option price model	FX volatility	1% – 40%

Other Information (Continued)

The impact of changing possible appropriate alternative parameter values on the fair value (after adjustments) of the financial instruments classified as Level 3 is shown in the sensitivity analysis presented below. For portfolios at fair value through profit or loss, the positive change applying appropriate potential alternatives would be €92 million at the reporting date (previous year: €91 million), and the negative change of €42 million (previous year: negative change of €34 million).

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

(€ millions)

	2019		2018	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
Fixed-income securities and other debt instruments	1	(1)	1	(1)
Equities	—	—	1	(1)
Asset-backed securities	2	—	1	—
Commodity/equity derivatives	65	(20)	69	(17)
Interest rate derivatives	4	(2)	4	(2)
Credit derivatives	20	(19)	15	(13)
Currency derivatives	—	—	—	—
Total	**92**	**(42)**	**91**	**(34)**

For fixed-income securities and other debt instruments and 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 interest rates and the implicit volatility.

Where trades are executed for which the transaction 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 transaction 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 transaction. As soon as a reference price can be determined for the transaction 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)

	2019	2018
Balance at 1/1	**18**	**15**
New transactions during the period	5	11
Write-downs	3	4
Expired transactions	—	—
Retroactive change in observability	1	4
Exchange rate changes	—	—
Balance at 30/06/2019 / 31/12/2018	**19**	**18**

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

(€ millions)

	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1)		FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2)		FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3)	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Financial assets recognised						
in the balance sheet at fair value						
Financial assets held for trading	15,812	18,614	56,736	48,382	1,191	1,961
thereof: derivatives	1,815	2,244	47,076	38,759	432	1,260
Financial assets at FVTPL	8,009	7,003	7,042	8,805	643	875
Financial assets at FVTOCI	7,328	6,994	1,153	376	—	—
Hedging derivatives	—	—	286	276	—	—
Financial liabilities recognised						
in the balance sheet at fair value						
Financial liabilities held for trading	6,116	8,707	44,059	38,148	766	1,250
thereof: derivatives	2,143	2,234	40,685	34,050	463	940
Financial liabilities at FVTPL	—	—	5,374	4,949	289	203
Hedging derivatives	1	1	880	597	—	—

Other Information (Continued)

The following table shows the development of the financial assets that are assigned to Level 3 as part of the fair value hierarchy: (€ millions)

	FINANCIAL ASSETS HELD FOR TRADING	FINANCIAL ASSETS AT FVTPL	FINANCIAL ASSETS AT FVTOCI	HEDGING DERIVATIVES
Balance at 1/1/2019	**1,961**	**875**	**—**	**—**
Additions				
Acquisitions	158	104	—	—
Realised gains[1]	163	15	—	—
Transfer from other levels	24	12	—	—
Other additions[2]	16	21	—	—
Reductions				
Sale	(558)	—	—	—
Repayment	—	(366)	—	—
Realised losses[1]	(339)	(3)	—	—
Transfer to other levels	(217)	(12)	—	—
Other reductions	(17)	(3)	—	—
Balance at 30/6/2019	**1,191**	**643**	**—**	**—**
Balance at 1/1/2018	**1,101**	**714**	**—**	**—**
Additions				
Acquisitions	1,260	62	—	—
Realised gains[1]	115	58	—	—
Transfer from other levels	6	7	—	—
Other additions[2]	30	205	—	—
Reductions				
Sale	(458)	(38)	—	—
Repayment	—	—	—	—
Realised losses[1]	(14)	(24)	—	—
Transfer to other levels	(64)	(2)	—	—
Other reductions	(15)	(107)	—	—
Balance at 31/12/2018	**1,961**	**875**	**—**	**—**

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

The additions from purchases mainly arise from the acquisition of individual illiquid corporate bonds and asset-backed securities. The majority of the other transfers to and from other levels relate to securities and result from an increase or decrease in the actual trading of the securities concerned and an associated change in the bid-offer spreads. The disposals are as a result of short-term foreign currency transactions in specific currencies that have not yet been classified as observable. Due to better observability of the liquidity of these currencies, these are now classified as Level 2. The expired transactions are thus shown as a disposal, while existing transactions are reported as transfer to other levels.

The following table shows the change in the financial liabilities assigned to Level 3 under the fair value hierarchy: (€ millions)

	FINANCIAL LIABILITIES HELD FOR TRADING		FINANCIAL LIABILITIES AT FVTPL		HEDGING DERIVATIVES	
	2019	2018	2019	2018	2019	2018
Balance at 1/1	**1,250**	**1,722**	**203**	**—**	**—**	**—**
Reclassification of financial liabilities						
held for trading to financial liabilities at FVTPL	—	(551)	—	551	—	—
Balance at 1/1 (after reclassification)	**1,250**	**1,171**	**203**	**551**	**—**	**—**
Additions						
Sale	177	700	—	—	—	—
Issues	92	149	152	106	—	—
Realised losses[1]	94	128	3	6	—	—
Transfer from other levels	37	16	94	1	—	—
Other additions[2]	6	6	1	10	—	—
Reductions						
Buy-back	(435)	(555)	(33)	(16)	—	—
Repayment	—	(5)	—	(210)	—	—
Realised gains[1]	(12)	(174)	(7)	(20)	—	—
Transfer to other levels	(439)	(159)	(123)	(218)	—	—
Other reductions	(4)	(27)	(1)	(7)	—	—
Balance at 30/6/2019 / 31/12/2018	**766**	**1,250**	**289**	**203**	**—**	**—**

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

The transfers to other levels relating to liabilities held for trading as well as financial liabilities are primarily attributable to the improved liquidity of the instruments underlying certain structured issues.

Other Information (Continued)

39 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 method used to determine the fair values for loans was developed further in the first half of 2018. While the method for determining the fair values of performing loans is based on the previous fair value model which was supplemented by additional factors, a separate model was implemented for determining the fair values of non-performing loans.

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 (based on Libor). 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 for the first time. 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. The sector for syndicated loans is taken into account in 2018 for the first time. 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 2018 for the first time 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 values of certain financial instruments stated with their nominal values are roughly equivalent to their carrying amounts. These include the cash and cash balances as well as receivables and liabilities without a defined maturity or fixed interest rate. Such instruments are transferred at regular intervals at the amount repayable (such as the repayment of a deposit repayable on demand at the nominal amount), meaning that listed prices for identical and similar instruments are available on inactive markets. These instruments are allocated to Level 2 accordingly.

The fair value calculation for other loans and receivables for which the fair value is not roughly equivalent to the carrying amount 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.

Since the parameters used to determine the real-world probability of default (PD) and loss given default (LGD) are not immaterial when determining the fair value, and these are determined on the basis of internal procedures meaning they cannot be observed on the market, the other loans and receivables are allocated to Level 3.

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

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

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

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

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

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

(€ billions)

	CARRYING AMOUNT		FAIR VALUE	
ASSETS	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Cash and cash balances	17.6	20.0	17.6	20.0
Financial assets held for trading	73.7	69.0	73.7	69.0
Financial assets at FVTPL	15.7	16.7	15.7	16.7
Financial assets at FVTOCI	8.5	7.4	8.5	7.4
Loans and receivables with banks (at cost)	33.3	33.6	33.3	33.8
Loans and receivables with customers (at cost)	139.2	133.7	143.0	136.7
thereof: finance leases	1.9	1.8	1.9	1.8
Hedging derivatives	0.3	0.3	0.3	0.3
Total	**288.3**	**280.7**	**292.1**	**283.9**

Other Information (Continued)

(€ billions)

ASSETS	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1)		FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2)		FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3)	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Financial assets not carried at fair value						
in the balance sheet						
Cash and cash balances	—	—	17.6	20.0	—	—
Loans and receivables with banks (at cost)	0.4	0.5	28.1	26.9	4.8	6.4
Loans and receivables with customers (at cost)	1.3	4.3	27.9	18.5	113.8	113.9
thereof: finance leases	—	—	—	—	1.9	1.8

(€ billions)

LIABILITIES	CARRYING AMOUNT		FAIR VALUE	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Deposits from banks	66.4	62.9	66.5	62.8
Deposits from customers	119.8	121.0	120.0	121.2
Debt securities in issue	26.6	24.4	29.2	26.3
Financial liabilities held for trading	50.9	48.1	50.9	48.1
Financial liabilities at FVTPL	5.7	5.2	5.7	5.2
Hedging derivatives	0.9	0.6	0.9	0.6
Total	**270.3**	**262.2**	**273.2**	**264.2**

(€ billions)

LIABILITIES	FAIR VALUE OBSERVED ON AN ACTIVE MARKET (LEVEL 1)		FAIR VALUE BASED ON VALUATION PARAMETERS OBSERVED ON THE MARKET (LEVEL 2)		FAIR VALUE BASED ON VALUATION PARAMETERS NOT OBSERVED ON THE MARKET (LEVEL 3)	
	30/6/2019	31/12/2018	30/6/2019	31/12/2018	30/6/2019	31/12/2018
Financial liabilities not carried at fair value						
in the balance sheet						
Deposits from banks	—	0.1	47.9	43.0	18.6	19.7
Deposits from customers	—	0.1	97.3	86.0	22.7	35.1
Debt securities in issue	9.3	5.9	5.1	5.9	14.8	14.5

The difference in HVB Group between the fair values and carrying amounts totals €3.8 billion (previous year: €3.2 billion) for assets and €2.9 billion (previous year: €2.0 billion) for liabilities. The balance of these amounts is €0.9 billion (previous year: €1.2 billion). When comparing carrying amounts and fair values for the hedged items, it should be noted that part of the undisclosed reserves/charges has already been included in the hedge adjustment amount.

40 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 agreement 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 agreement: (€ millions)

				AMOUNTS NOT RECOGNISED			
	FINANCIAL ASSETS (GROSS)	FINANCIAL LIABILITIES NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED FINANCIAL ASSETS (NET)	EFFECTS OF MASTER NETTING ARRANGEMENTS	FINANCIAL INSTRUMENTS AS COLLATERAL	CASH COLLATERAL	NET AMOUNT
Derivatives[1]	78,939	(29,330)	49,609	(28,800)	(232)	(11,221)	9,356
Reverse repos[2]	23,689	(3,920)	19,769	—	(19,617)	—	152
Loans and receivables[3]	93,374	(4,410)	88,964	—	—	—	88,964
Total at 30/6/2019	**196,002**	**(37,660)**	**158,342**	**(28,800)**	**(19,849)**	**(11,221)**	**98,472**
Derivatives[1]	58,738	(16,199)	42,539	(24,834)	(353)	(8,880)	8,472
Reverse repos[2]	26,455	(2,687)	23,768	—	(21,962)	—	1,806
Loans and receivables[3]	87,397	(3,582)	83,815	—	—	—	83,815
Total at 31/12/2018	**172,590**	**(22,468)**	**150,122**	**(24,834)**	**(22,315)**	**(8,880)**	**94,093**

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" with an amount of €1,053 million (previous year: €2,665 million).
3 Only relates to current accounts, cash collateral or pledged credit balances and other loans and receivables (including cumulative variation margins), as covered in the Notes "Loans and receivables with banks (at cost)" and "Loans and receivables with customers (at cost)".

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

				AMOUNTS NOT RECOGNISED			
	FINANCIAL LIABILITIES (GROSS)	FINANCIAL ASSETS NETTED IN THE BALANCE SHEET (GROSS)	RECOGNISED LIABILITIES (NET)	EFFECTS OF MASTER NETTING ARRANGEMENTS	FINANCIAL INSTRUMENTS AS COLLATERAL	CASH COLLATERAL	NET AMOUNT
Derivatives[1]	75,956	(31,784)	44,172	(28,800)	(559)	(10,864)	3,949
Reverse repos[2]	25,717	(3,920)	21,797	—	(21,760)	—	37
Liabilities[3]	109,957	(1,956)	108,001	—	—	—	108,001
Total at 30/6/2019	**211,630**	**(37,660)**	**173,970**	**(28,800)**	**(22,319)**	**(10,864)**	**111,987**
Derivatives[1]	55,953	(18,131)	37,822	(24,834)	(492)	(8,713)	3,783
Reverse repos[2]	27,435	(2,687)	24,748	—	(23,199)	—	1,549
Liabilities[3]	107,921	(1,650)	106,271	—	—	—	106,271
Total at 31/12/2018	**191,309**	**(22,468)**	**168,841**	**(24,834)**	**(23,691)**	**(8,713)**	**111,603**

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 with an amount of €522 million (previous year: €1,401 million).
3 Only relates to current accounts, cash collateral or pledged credit balances and other liabilities (including cumulative variation margins), as covered in the Notes "Deposits from banks" and "Deposits from customers".

Other Information (Continued)

Compliant with IAS 32.42, financial assets and liabilities with the same counterparty are to be offset and recognised in the balance sheet at the net amount if such offsetting 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 and the set-off amounts to the net amounts after offsetting for these set-offs in the balance sheet. At HVB Group, the set-offs in the balance sheet relate to transactions with central counterparties (CCPs), being OTC derivatives (set-off 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 listed future-styled derivatives 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 master netting arrangement or similar agreement, 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 context is presented in the tables. Furthermore, the securities lending transactions shown off the balance sheet without the cash collateral are not included in the above netting tables.

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

(€ millions)

	30/6/2019		31/12/2018	
	CARRYING AMOUNT	OF WHICH: TRANSFERRED AS COLLATERAL	CARRYING AMOUNT	OF WHICH: TRANSFERRED AS COLLATERAL
Financial assets held for trading	73,739	2,035	68,957	2,114
Financial assets at FVTPL	15,694	1,777	16,683	760
Financial assets at FVTOCI	8,481	1,074	7,370	1,931
Loans and receivables with banks (at cost)	33,266	—	33,648	1,132
Loans and receivables with customers (at cost)	139,173	—	133,706	50
Total	**270,353**	**4,886**	**260,364**	**5,987**

42 Contingent liabilities and other commitments

(€ millions)

	30/6/2019	31/12/2018
Contingent liabilities[1]	23,853	26,204
Guarantees and indemnities	23,853	26,204
Other commitments	53,711	49,438
Irrevocable credit commitments	53,680	49,405
Other commitments[2]	31	33
Total	**77,564**	**75,642**

1 Contingent liabilities are offset by contingent assets to the same amount.
2 Not included in other commitments are the future payment commitments arising from non-cancellable operating leases.

HVB 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 €82 million at the reporting date (previous year: €64 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 €22 million at the reporting date (year-end: €22 million).

Euro-denominated government 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.

UniCredit S.p.A. and 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 fulfill 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. Proceedings are ongoing. There is no legal deadline for the Commission to complete antitrust inquiries.

Other Information (Continued)

On 11 June 2019, HVB and UniCredit Capital Markets LLC have been 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 consolidated class action complaint alleges a conspiracy among dealers of Euro-denominated government 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. The consolidated class action complaint does not include a quantification of damages claimed. The proceedings are in their inception. Motions to dismiss – a procedural device contemplated by the United States Federal Rules of Civil Procedure which provides defendants with an opportunity to challenge the legal sufficiency of a complaint and present arguments that the complaint should be dismissed – are currently scheduled to be fully briefed by December 2019 and will include the argument that the complaint fails to state a claim.

Contingent liabilities payable to related parties (€ millions)

	30/6/2019	31/12/2018
Non-consolidated affiliated companies	1,418	1,526
of which:		
UniCredit S.p.A.	758	745
Sister companies	660	781
Subsidiaries	—	—
Joint ventures	32	46
Associated companies	—	—
Other participating interests	80	132
Total	**1,530**	**1,704**

43 Information on relationships with related parties

Besides the relationships with consolidated, affiliated companies, 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 into the UniCredit group of companies. The quantitative information in this regard can be found in the notes to the balance sheet and the income statement.

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. The section of the Risk Report in the Management Report entitled “Credit risk” under “Risk types in detail” contains further information regarding the exposure to UniCredit and its subsidiaries.

Like other affiliated companies, 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 €239 million for these services in the reporting year (previous-year period: €271 million). This was offset by income of €16 million (previous-year period: €14 million) from services rendered and internal charges. Moreover, software products worth €0 million (previous-year period: €0 million) were purchased from UniCredit Services S.C.p.A.

Furthermore, HVB 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 affiliated companies in line with a standard business and operating model. HVB incurred expenses of €52 million for these services in the reporting year (previous-year period: €60 million).

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

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

	30/6/2019			31/12/2018		
	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ASSUMED	LIABILITIES	LOANS AND RECEIVABLES	CONTINGENT LIABILITIES ASSUMED	LIABILITIES
Members of the Management Board of UniCredit Bank AG	2,199	10	3,951	2,235	10	3,166
Members of the Supervisory Board of UniCredit Bank AG	1	—	4,652	—	—	4,804
Members of the Executive Management Committee[1]	—	—	8,449	—	—	8,374

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

Members of the Supervisory Board and Management Board at HVB, and 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 1.36% and 4.14% falling due in the period from 2019 to 2037.
An overdraft facility at an interest rate of 6.0% was granted to a member of the Supervisory Board.

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

Other Information (Continued)

44 Supervisory Board

Chairman

Gianpaolo Alessandro
since 3 June 2019

Gianni Franco Papa
until 2 June 2019

Deputy Chairmen

Florian Schwarz

Dr Wolfgang Sprissler

Members

Paolo Cornetta

Beate Dura-Kempf
until 31 January 2019

Francesco Giordano

Prof Dr Annette G. Köhler

Dr Marita Kraemer

Klaus-Peter Prinz

Claudia Richter
since 8 February 2019

Oliver Skrbot

Christian Staack

Gregor Völkl

45 Management Board

Sandra Betocchi Drwenski	Chief Operating Officer (COO)
Markus Beumer	Commercial Banking – Unternehmer Bank
Dr Emanuele Buttà	Commercial Banking – Private Clients Bank
Ljiljana Čortan	Chief Risk Officer (CRO)
Dr Michael Diederich	Spokesman of the Management Board Human Capital/Labour and Social Affairs
Jan Kupfer	Corporate & Investment Banking
Guglielmo Zadra	Chief Financial Officer (CFO)

Munich, 5 August 2019

UniCredit Bank AG
The Management Board

Betocchi Drwenski Beumer Dr Buttà Čortan

Dr Diederich Kupfer Zadra

Declaration by the Management Board

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

Munich, 5 August 2019

UniCredit Bank AG
The Management Board

Betocchi Drwenski | Beumer | Dr Buttà | Čortan

Dr Diederich | Kupfer | Zadra

Contacts
Should you have any questions about the annual report or our half-yearly financial report, please contact Media Relations by
calling +49 (0)89 378-25801,
faxing +49 (0)89 378-3325263
You can call up important company announcements as soon as they have been published by visiting our website at www.hvb.de

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

Ordering
To order more copies of the half-yearly financial report or one of the publications listed here, please contact our Reporting Service by
calling +49 (0)89 378-25801 or
faxing +49 (0)89 378-3325263.

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

Published by:
UniCredit Bank AG
Head Office
D-81925 Munich
www.hvb.de
Registrar of companies: Munich HRB 421 48
Cover and creative definition: UniCredit S.p.A.
Design, graphic development and production: UniCredit S.p.A.
Typesetting: Serviceplan Solutions 1 GmbH & Co. KG, Munich
Printed by: Gotteswinter und Aumaier GmbH
Printed in Germany

MIX
Paper from responsible sources
FSC® C018312

The paper used for this Half-yearly Financial Report has been certified according to the criteria set by the Forest Stewardship Council® (FSC®).
FSC® has developed strict socioecological standards for forest management.
These are designed to curb uncontrolled deforestation and other environmental destruction; they also protect human rights.
All products carrying the FSC® label pass through the processing and trading chain.
Thus, the FSC® rules also apply to paper-processors such as printing companies.

Banking that matters.

HypoVereinsbank

Member of UniCredit

50064250