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2017

UniCredit Bank AG Annual Report

Banking that matters.

HypoVereinsbank
Member of UniCredit

Disclaimer

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

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Legal structure

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

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

Organisation of management and control

Leadership function and Supervisory Board

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

Mr Heinz Laber resigned from the Management Board effective from the end of 31 October 2017 and Dr Theodor Weimer as well as Mr Andrea Varese effective from the end of 31 December 2017. Ms Sandra Betocchi Drwenski was appointed a new member of the Management Board to replace Mr Heinz Laber with effect from 1 November 2017 and has been in charge of the COO unit since that time. Ms Ljiljana Čortan was appointed to the Management Board as the Chief Risk Officer (CRO) with effect from 1 January 2018. Dr Michael Diederich assumes the office of Board Spokesman with effect from 1 January 2018.

The Supervisory Board of the Bank has 12 members and has an equal number of employee and shareholder representatives. The task of the Supervisory Board is to monitor and regularly advise the Management Board as it conducts its business. The Supervisory Board has adopted by-laws specifically defining the details of the work within the Supervisory Board, the creation and tasks of committees and the tasks of the chairman of the Supervisory Board. In addition, the by-laws state that certain types of transactions require the approval of the Supervisory Board.

Mr Jens-Uwe Wächter and Mr Werner Habich resigned from the Supervisory Board as employee representatives effective from the end of 30 September 2017 and 30 November 2017 respectively. These gentlemen were succeeded on the Supervisory Board by the substitute members Mr Christian Staack with effect from 1 October 2017 and Mr Oliver Skrbot with effect from 1 December 2017, who were already elected in May 2015 in accordance with the German Act on the Co-determination of Employees in a Cross-border Merger (Gesetz über die Mitbestimmung der Arbeitnehmer bei einer grenzüberschreitenden Verschmelzung – MgVG). A list showing the names of all of the members of the Management Board and the Supervisory Board of HVB is given in the Note "Supervisory Board", and the Note "Management Board", in the present Annual Report.

Statement pursuant to Section 289f (4) of the German Commercial Code

The Supervisory Board of UniCredit Bank AG adopted a target that one-third of the members of the Supervisory Board (i.e. four out of twelve) should be women, which was to be achieved by the end of the first statutory compliance period (30 June 2017). Both the shareholder and the employee representatives on the Supervisory Board were to contribute to achieving these targets. Since the election of the Supervisory Board in the spring of 2015, three women have been members of the Supervisory Board: Dr Marita Kraemer and Prof Dr Annette G. Köhler as shareholder representatives and Ms Beate Dura-Kempf as an employee representative. As the next Supervisory Board elections will not be taking place until 2020, the target can be achieved only by members resigning from the Supervisory Board. In 2016, the Supervisory Board discussed the successors for two members on the Supervisory Board and proposed Mr Paolo Cornetta (Head of HR Strategy of UniCredit S.p.A) and Mr Francesco Giordano (Co-Chief Operating Officer of UniCredit S.p.A. and former CFO of UniCredit Bank AG) for election to the Supervisory Board. In view of the special aptitude and professional qualifications of the two candidates and the associated complementation of the Supervisory Board's overall profile, it was accepted that the target of four female Supervisory Board members could not be achieved when members were replaced in 2016. In the 2017 financial year, the Supervisory Board once again set a target that one-third of the members of the Supervisory Board should be women (i.e. four out of twelve), which is to be achieved by 31 December 2021. It was impossible to achieve the target upon the resignation of two employee representatives from the Supervisory Board as they were succeeded by the substitute members Mr Christian Staack and Mr Oliver Skrbot who were already elected in May 2015 in accordance with the German Act on the Co-determination of Employees in a Cross-border Merger (MgVG). Achieving this target will be given priority particularly during the scheduled elections to the Supervisory Board in the 2020 financial year.

For the proportion of women on the Management Board, the Supervisory Board adopted a target that one-seventh of the members should be women (i.e. one out of seven), which was to be achieved by the end of the first statutory compliance period (30 June 2017). In 2015, the Supervisory Board appointed Dr Michael Diederich (CIB) and in 2016, Mr Robert Schindler (Commercial Banking/Unternehmer Bank business unit) as well as Mr Guglielmo Zadra (CFO) as members of the Management Board. In view of the special aptitude and professional qualifications of the candidates and the associated complementation of the Management Board's overall profile, it was accepted in each case that the target of one-seventh of the Management Board members would not be achieved. In the 2017 financial year, the Supervisory Board once again set a target that one-seventh of the members of the Management Board should be women (i.e. one out of seven), which is to be achieved by 31 December 2021. By appointing Ms Sandra Betocchi Drwenski as a Management Board member (COO) from 1 November 2017 this target was achieved. In addition, Ms Ljiljana Čortan was appointed a Management Board member (CRO) from 1 January 2018.

For the proportion of women in the first and second management levels below the Management Board respectively, the Management Board set the following targets, which were to be achieved by the end of the first statutory compliance period (30 June 2017): 22 percent of women in the first management level and 24 percent in the second management level below the Management Board. The Bank has already long focused on measures to promote women and more mixed management teams: concepts for reconciling work and family life were developed; career development instruments were put in place to also support particularly female talents and top performers in their careers; talented women are made visible in discussion and management forums. The Bank already defined internal targets coupled with specific initiatives for the individual business segments in 2012. These are evaluated and followed up on a regular basis.

Based on this approach the proportion of women close to Management Board level has continually increased since 2012, even though the ambitious targets for the two management levels below the Management Board have not yet been reached. At 30 June 2017, the proportion of women at the first level below the Management Board was 18 percent (target: 22 percent) and at the second level below the Management Board 17 percent (target: 24 percent). The reasons for this can be found firstly in the structural conditions of the individual business segments to begin with. In areas with a traditionally rather

Business Situation and Trends (Continued)

low representation of women, the proportion of women in management positions increased only at a slow but steady rate while in areas with an equal distribution of men and women, the targets had already been met. Secondly, to date the Bank has deliberately applied sustainable measures effective in the medium term to prepare high-potential female employees for their career. This ensured that there was a steady improvement in the equal representation of men and women in the candidate pools for higher-level management positions.

In the 2017 financial year, the Management Board confirmed the targets of 22 percent of women in the first and 24 percent in the second management level below the Management Board, which are now to be achieved by 31 December 2021. In future the Bank will place a greater focus than before on binding measures and percentages in the talent and successor pools as well as on promotion and appointment processes. Particularly in the rapidly changing environment of the banking business and in connection with our transformation strategy, it should be possible to easily achieve our gender goals.

Non-financial reporting
In the context of transposing the CSR Directive (Corporate and Social Responsibility) into German law, certain large undertakings have been obliged to add a non-financial statement to their management report since the 2017 financial year. As a fully consolidated subsidiary of the UniCredit corporate group, HVB waives publishing its own non-financial statement in accordance with Section 289b (2) of the German Commercial Code (Handelsgesetzbuch – HGB). The non-financial statement is issued, with a discharging effect for HVB, by our parent company, UniCredit S.p.A., Milan, and can be found on UniCredit's website (www.unicreditgroup.eu/en/a-sustainable-bank.html).

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

Business model, main products, sales markets, competitive position and locations in the 2017 financial year
HVB is part of UniCredit, a simple, successful, pan-European commercial bank, with fully plugged in Corporate & Investment Banking. It delivers a unique Western, Central and Eastern European network to our extensive client franchise. This enables us to combine our regional strength and competence with the potential and know-how provided by an international banking group. Our integration into UniCredit is a strong basis for consistently exploiting its international network and economies of scale. UniCredit has a divisionally and regionally diversified business model. It thus facilitates unique access to leading banks in 14 core markets and 18 other countries worldwide for its customers.

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. HVB has a well-developed network of branches in Germany, which was modified to accommodate changed patterns of customer behaviour in recent years. In total, HVB Group has 553 offices around the world, including 350 HVB branches in Germany. In addition to its branch network, customers are served irrespective of their location in HVB's online branch in the retail banking business and through Business Easy in the corporate banking business. A breakdown of the offices of HVB by region is shown in the Note "Offices" in this Annual Report.

With our customer-centric business model, excellent capital base, stable operating profitability and solid funding foundation as well as a good market position in our core business areas, we are a sought-after and reliable partner for our customers and investors.

Business segments
HVB is divided into the following business segments:
– Commercial Banking
– Corporate & Investment Banking
– Other/consolidation

Commercial Banking business segment
The Commercial Banking business segment serves all the customers in Germany with a need for standardised or personalised service and advice in diverse banking services in its Private Clients Bank and Unternehmer Bank business units. Depending on the advisory approach, a distinction is made as appropriate within Commercial Banking between retail customers, private banking customers, high net worth individuals/ultra high net worth individuals and family offices in wealth management, business and corporate customers as well as commercial real estate customers. In total, Commercial Banking serves around 2.5 million customers. In doing so, the Commercial Banking business segment builds on the common "HypoVereinsbank" brand and a largely identical sales network.

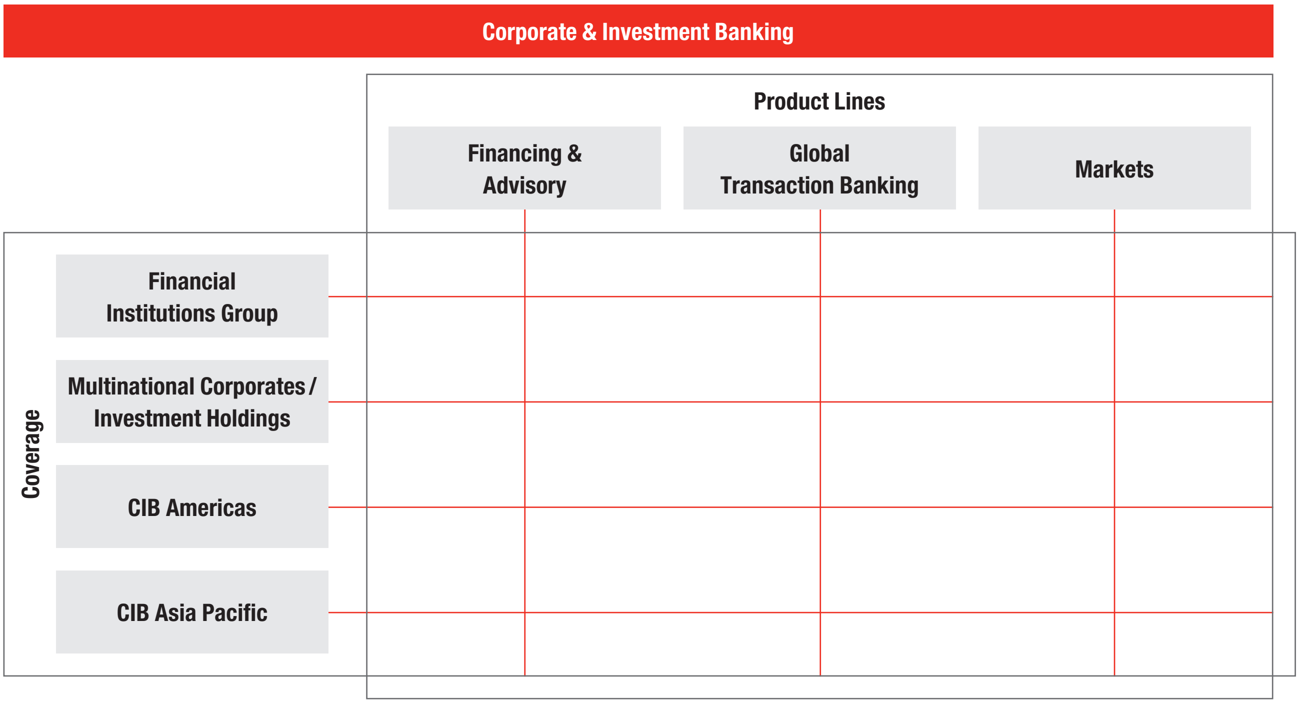
In line with the universal bank model, the range of products and services of Commercial Banking enables comprehensive customer support to be provided. This ranges from payment products, consumer loans, mortgage loans, savings-and-loan and insurance products and banking services for retail customers through to business loans and foreign trade financing as well as liquidity and financial risk management for corporate customers through to investment banking products for companies with access to the capital market. For customers in the private banking and wealth management customer segments, we offer comprehensive financial and asset planning with needs-based advisory services by personal advisors and specialists. In addition to tailored portfolio concepts and financing solutions for high net worth private customers with an entrepreneurial background, the wealth management approach includes the brokerage of shareholdings.

Corporate & Investment Banking business segment
CIB is a global business segment of UniCredit. It is organised based on a matrix structure and has business activities in the three important group companies: HVB, UniCredit Bank Austria AG and UniCredit S.p.A. CIB's business success is based on the close cooperation and interaction between customer care and product units as well as on cooperation with other countries and business segments of UniCredit and the credit risk management units responsible.

Business Situation and Trends (Continued)

As CIB operates as a global business segment, all the statements and definitions apply both to CIB within HVB and to CIB worldwide. HVB helps to shape the global CIB strategy through its CIB business segment, which is a centre of competence for international markets and investment banking. The member of HVB's Management Board responsible for CIB has decided to apply the global CIB strategy to HVB's CIB business so as to ensure a standardised approach for our customers worldwide.

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



Customer support is organised horizontally:
Financial Institutions Group (FIG), Multinational Corporates (MNC) and Investment Holdings (GFO), CIB Americas and CIB Asia Pacific.

Three product factories are organised vertically:
Financing & Advisory (F&A) supports customers worldwide through the following departments: Financial Sponsors Solutions (FSS), Infrastructure & Power Project Finance (IPPF), Natural Resources (NR), Commodity Trade Finance (CTF) and Structured Trade and Export Finance (STEF).

Global Transaction Banking (GTB) offers a diverse range of innovative products in the Cash Management and Trade Finance departments and thus meets the transaction-oriented needs of our customers in the fields of payments, account information, cash flow optimisation, liquidity management and mainly short-term import and export finance.

Markets is a customer-related business that supports the corporate and institutional operations of HVB as an integral part of the CIB value chain. The product area spans all asset classes: interest rates, currencies, commodities and equity derivatives. It offers our institutional customers, corporate customers and private investors risk management solutions and investment products through our own or external networks.

The aim of CIB's growth strategy concept is to provide our Mittelstand customers with greater access to HVB's investment banking platform. To ensure more intensive care and support in Germany, a joint venture (JV) has been set up between CIB and UBK and embedded in the organisation of the CIB business segment. The organisational set-up focuses on selective product ranges from the Corporate Treasury Sales (CTS), Debt Capital Management (DCM), Equity Capital Management (ECM) and Corporate Finance Advisory (M&A) departments. The respective product specialists of the joint venture focus exclusively on the needs of UBK customers. Cross-selling is to be boosted through this focused sales approach.

Other/consolidation business segment
The Other/consolidation business segment encompasses the Chief Operating Office business unit, activities of the Group Corporate Centre business unit and consolidation effects.

The Chief Operating Office business unit is a central internal service provider for customers and employees. The Chief Operating Office activities encompass purchasing, organisation, corporate security, logistics and facility management, cost management, back-office functions for credit, accounts, foreign exchange, money market and derivatives as well as in-house consulting. Payments, securities settlement, IT application development and IT operations have been outsourced. Strategic real estate management at HVB is also the responsibility of the Chief Operating Office business unit and is carried out by the Real Estate (GRE) unit, HVB Immobilien AG, Munich and by UniCredit Business Integrated Solutions S.C.p.A., Milan, which was engaged by HVB Immobilien AG, Munich by way of an operating contract.

The Group Corporate Centre business unit contains the units and activities that do not lie within the area of responsibility of the individual business segments. This includes the CFO, CRO and CEO units and among other things, consolidated subsidiaries and non-consolidated shareholdings provided they are not allocated to other business segments. Furthermore, the securities holdings for which the Management Board is responsible are reflected in this business unit along with the arrangements and decisions of the management within asset/liability management. This includes the securities and money market transactions with UniCredit S.p.A. and its subsidiaries. In addition, the Other/consolidation business segment contains the real estate restructuring customer portfolio.

Transform 2019
The persistently challenging conditions for the banking sector and the huge downward pressure on profitability and costs this entails is making a further adjustment of bank structures and processes necessary. In the second half of 2016, we therefore established the 2017–2019 Strategy Plan to ensure a successful future for the Bank going forward. Our now updated strategic planning is embedded in the group-wide Transform 2019 programme. Our programme is based on proactive action which, in addition to the increased realisation of cross-selling potential, also focuses on a further optimisation of our cost structure by streamlining the organisation and processes. At the same time, another adjustment of our staffing levels is being carried out. In this context, more jobs will be shed at HVB overall by 2019. The job cuts will affect all areas of the Bank. By exploiting normal staff fluctuation and continuing existing programmes to create new employment perspectives, we are implementing the job cuts in a socially responsible manner.

Corporate acquisitions and sales
In March 2016, we reached an agreement with Bremer Kreditbank Aktiengesellschaft, Bremen, on the sale of Bankhaus Neelmeyer AG, Bremen, which had until then been a fully owned subsidiary of HVB. The closing of the transaction ("closing") took place at the end of 31 March 2017.

Business Situation and Trends (Continued)

Economic report

Underlying economic conditions

According to projections by the IMF, the global economy grew by 3.7% in 2017. Growth accelerated above all in the USA and the eurozone but the environment and growth prospects also brightened for many emerging and developing countries. This development was buoyed by a pick-up in world trade and higher commodity prices. In particular, the increase in oil prices compared with 2016 eased the situation for oil-exporting countries such as Russia, especially in the second half of 2017. Economic growth in China also accelerated slightly in the past year. In this context, GDP growth and industrial production were supported above all by fiscal stimuli such as infrastructure projects while the change in China's economic structures towards more private consumption and services continued apace.

The US economy was one of the main drivers of growth in the global economy again in 2017. According to the Bureau of Economic Analysis, real GDP growth reached 2.3% in the USA and was thus higher than the previous year's figure (up 1.5%), although fiscal measures aiming to support growth including in particular a reduction in income and corporate tax, as announced by Donald Trump before his election as the new US president, were approved but will not take effect until 2018. The momentum in the labour market once again proved to be a key factor. The continued fall in the unemployment rate close to the 4% threshold combined with a significant decrease in the savings rate resulted in higher consumer spending and increased wage pressure and thus to a slight rise in the overall inflation rate.

In the eurozone the 2.5% increase in the GDP in 2017 according to EuroStat was considerably higher than in the previous year (up 1.8%). This acceleration was primarily attributable to a stronger recovery in global trade, especially in emerging countries. However, growth was once more largely driven by domestic demand, even though there was a moderate decline in the expansion rate of consumer spending as a result of higher inflation rates (negative purchase power effect).

The extension of the ECB's bond-buying programme until the end of 2017 at a lower amount of €60 billion per month as announced in December 2016 ensured favourable financing terms also in 2017. The inflation rate in the eurozone increased to 1.5% for 2017 as a whole and was thus again below the ECB's target rate of 2% in the reporting period.

At country level (data according to the national statistical offices), the GDP in Germany grew by 2.2% in 2017 (not adjusted for calendar reasons) compared with 1.9% in 2016, while France recorded a 1.9% increase in growth in 2017 (previous year: 1.2%). Italy's economic growth accelerated to 1.5% in 2017 compared with 1.1% in the previous year, while the economic recovery in Spain, after a very strong year in 2016, is estimated to have weakened slightly from 3.2% to around 3.1% in 2017. In the United Kingdom, GDP growth came to 1.8% in 2017 compared with 1.9% in 2016.

Besides domestic demand, the pick-up in global trade gave further fillip to growth in the German economy in 2017. In addition to a robust rise in consumer spending, there were also positive stimuli from the construction industry. Strong exports also increased the demand for investments in equipment.

Sector-specific developments

At the beginning of 2017, political risk was one of the main concerns of investors, particularly in respect of the cohesion of the eurozone. In the first half of 2017, market sentiment improved considerably in the wake of the election results in the Netherlands and France. In the second half of the year, the positive mood continued driven by very good macroindicators that exceeded original expectations. After the election results, attention focused increasingly on the ECB's future policies.

After the US election and following the interest rate increases by the FED, the level of interest rates in the USA rose sharply in 2017. The ten-year US treasury rose to over 2.60% by March 2017 and was thus more than one percentage point higher than the level in September 2016. Mid-2017 the yield fell to 2.04% but rose once again to 2.40% at the end of the year. In contrast to the USA, the central bank in Europe has not yet heralded a turnaround in interest rates. The 3-month Euribor remained at the level of minus 0.33% in 2017. The spreads continued to narrow on credit markets in 2017. For non-financials with good credit ratings the spreads narrowed in 2017 by 30 basis points (bps), following on from the 33bps narrowing in 2016. A similar development was seen in the senior bonds of banks in 2017 with a spread narrowing of 22bps. This development can be attributed to the ECB's purchase programme, the low interest rates and the positive economic environment.

The favourable sentiment was also felt on stock markets where the DAX 2017 rose by over 11%. Bank shares showed a slightly better performance than the overall market. The STOXX Europe 600 Banks index was up 7.5% in 2017 while the EURO STOXX 50 increased only by 5% over the year as a whole.

The ECB's purchase programme has been continued since April 2017 at a lower volume of €60 billion per month. The programme was extended for the period from January 2018 until at least September 2018 but reduced to a monthly volume of €30 billion. In addition, the last of the four tranche drawdowns under the TLTRO II programme took place in March 2017. This enabled liquidity of €233.5 billion to be provided to 474 banks, which was by far the largest net drawdown of the four TLTRO II tranches. The conditions for TLTRO II are favourable and involve rates as low as minus 0.4% provided banks are willing to expand their lending beyond set thresholds.

In 2017, the euro increased against the US dollar by over 14%. The appreciation of the single European currency reflects the robust growth in Europe. The euro rose 4% against the British pound in 2017. One driver was the outcome of the early general election in the United Kingdom, although the British pound appreciated again at year-end 2017 as a result of the progress made in the Brexit negotiations. The euro also increased significantly to more than 9% against the Swiss franc over the course of 2017.

In 2017, the Italian banking sector came under greater scrutiny from investors due to the relatively large stock of impaired loans on its books. Several banks in Italy presented plans to reduce the high level of impaired loans and have partially implemented these. This was assisted by Italy's rescue package in the amount of €20 billion, which was used to support three Italian banks until July 2017. In addition, the partial consolidation within the sector continued. In December 2016, our parent company, UniCredit S.p.A., presented an extensive programme geared to reducing its portfolio of impaired loans, which does not involve any form of government aid. The action taken caused a significant improvement in investor sentiment regarding the Italian banking sector.

Business Situation and Trends (Continued)

Operating performance

The 2017 income statement and important events in the 2017 financial year

Income statement	2017 € millions	2016 € millions	CHANGE € millions	in %
Net interest income	2,807	2,844	(37)	(1.3)
Net fees and commissions	1,194	1,135	+ 59	+ 5.2
Net income from the held-for-trading portfolio	652	572	+ 80	+ 14.0
Other operating income less other operating expenses	212	(23)	+ 235	
Operating income	**4,865**	**4,528**	**+ 337**	**+ 7.4**
General administrative expenses	(3,144)	(3,914)	+ 770	(19.7)
Payroll costs	(1,544)	(2,048)	+ 504	(24.6)
Other administrative expenses[1]	(1,600)	(1,866)	+ 266	(14.3)
Operating result before provisions for losses on loans and receivables	**1,721**	**614**	**+ 1,107**	**>+ 100.0**
Provisions	(244)	(480)	+ 236	(49.2)
Operating result	**1,477**	**134**	**+ 1,343**	**>+ 100.0**
Other income less other expenses	113	104	+ 9	+ 8.7
Extraordinary expenses	(130)	(69)	(61)	+ 88.4
Profit before tax	**1,460**	**169**	**+ 1,291**	**>+ 100.0**
Tax	(160)	(164)	+ 4	(2.4)
Net income	**1,300**	**5**	**+ 1,295**	**>+ 100.0**
Transfer to the reserve for shares in a controlling				
or majority interest-holding company	(2)	—	(2)	
Withdrawal from the reserve for shares in a controlling				
or majority interest-holding company	—	84	(84)	(100.0)
Transfer to other retained earnings	—	(84)	+ 84	(100.0)
Withdrawal from other retained earnings	2	3,000	(2,998)	(99.9)
Profit available for distribution	**1,300**	**3,005**	**(1,705)**	**(56.7)**

1 including standard amortisation and depreciation on intangible assets and property, plant and equipment

Net interest income

At €2,807 million, the net interest income generated in the reporting period – net interest income/expenses including current income from equity securities and other variable-yield securities, participating interests and shares in affiliated companies as well as income from profit-pooling and profit-and-loss transfer agreements – is almost at the same level as in the previous year (€2,844 million).

Current income of €288 million (previous year: €131 million) includes dividends from participating interests, affiliated companies and profit pools. This total includes dividend income of €105 million received from the dividend payout by our subsidiary UniCredit Luxembourg S.A., Luxembourg.

Net fees and commissions
At €1,194 million, net fees and commissions were higher than in the previous year (€1,135 million).

Fees and commissions receivable of €1,449 million decreased slightly compared with the previous year (€1,473 million). The decline in fees and commissions receivable, particularly in the securities and portfolio business as well as in the lending and credit business, was unable to be compensated for by the increase in income from payments and brokerage operations.

Fees and commissions payable fell a sharp €84 million to €255 million in the reporting period (previous year: €338 million), which is largely attributable to the commission paid in the securities and portfolio business and in other services.

Net income from the held-for-trading portfolio
The net income from the held-for-trading portfolio increased by €572 million to €652 million compared with the previous year.

Interest-bearing transactions, at €274 million, and the equity business, at €236 million, are the main components of net income from the held-for-trading portfolio.

Other operating income less other operating expenses
The balance of other operating income and other operating expenses increased significantly by €235 million to an income of €212 million in the 2017 financial year (previous year: expense of €23 million) as a result of significantly lower provisions compared with the previous year. Operating income also benefited from a refund in connection with a completed tax audit.

General administrative expenses
General administrative expenses fell year-on-year by €770 million to €3,144 million (previous year: €3,914 million), which had been weighed down by restructuring costs in the previous year.

To counteract the persistently challenging conditions for the banking sector and the huge downward pressure on profitability and costs this entails, we established the groupwide Transform 2019 Strategic Plan in 2016. This enabled us to achieve significant reductions in costs, particularly in payroll costs and in other administrative expenses.

Amortisation and depreciation on intangible assets and property, plant and equipment contained in other administrative expenses fell by €4 million to €26 million.

Operating result before provisions for losses on loans and receivables
The operating result before provisions for losses on loans and receivables increased by €1,107 million year-on-year to €1,721 million. This resulted in a substantial improvement in the cost-income ratio (ratio of operating expenses to operating income) to 64.6% after 86.4% (adjusted for restructuring costs: 73.4%) in the previous year.

Provisions for losses on loans and receivables
The provisions for losses on loans and receivables amounted to €244 million in the reporting period (previous year: €480 million). At €236 million, the net valuation expense on lending operations contained in provisions for losses on loans and receivables is significantly lower than the need for additions in the previous year of €464 million.

The net loss from securities held for liquidity purposes improved to €9 million (previous year: net loss of €16 million).

Other income less other expenses
Among other things, the net other income of €113 million (previous year: net income of €104 million) contains gains on the disposal of our participating interests in Concardis GmbH, Eschborn and on the disposal of our fully owned subsidiary Bankhaus Neelmeyer AG, Bremen.

Extraordinary expenses
When the German Accounting Law Modernisation Act (Bilanzrechtsmodernisierungsgesetz – BilMoG) was introduced in 2010, HVB made use of the option to aggregate the amount allocable to the provisions for pensions in annual instalments of at least one-fifteenth in every financial year up to 31 December 2024. The amount of €130 million still outstanding from the omitted transitional allocation was fully written up through profit or loss in the financial year and is contained in extraordinary expenses.

Profit before tax
Profit before tax increased year-on-year by €1,291 million to €1,460 million.

Business Situation and Trends (Continued)

Taxes
The tax payable decreased a slight €4 million during the reporting period to €160 million compared with the previous year. Current legislative developments are reflected in the taxes payable.

Net income for the year and appropriation of net income
The profit available for distribution, which forms the basis for the appropriation of net income, amounts to €1,300 million. We will propose to the Shareholders' Meeting that a total dividend of €1,300 million be paid to UniCredit S.p.A. (UniCredit) Milan, Italy. This represents a dividend of around €1.62 per share after around €3.75 in 2016. The profit of €3,005 million available for distribution in the previous year (consisting of the net profit of €5 million and a withdrawal from other retained earnings of €3,000 million) was paid to UniCredit in accordance with a resolution adopted by the Shareholders' Meeting on 22 May 2017.

Assessment of the business situation
In our expectations concerning the development of profit before tax outlined in the outlook in last year's Management Report, we forecast a moderate increase compared with the previous year. Taking account of the restructuring costs contained in the previous year, we surpassed these expectations by far in the reporting period. We likewise increased operating income despite the persistently difficult market environment and contrary to our expectations. The Bank succeeded in again sharply reducing operating costs through the consistent implementation of its Transform 2019 strategy, also contrary to the budgeted costs, which is reflected in the substantial improvement in the cost-income ratio. At year-end, provisions for losses on loans and receivables were lower than budgeted. As expected, we continue to have an excellent capital base also in the current reporting period.

Financial position

Total assets
HVB's total assets amounted to €263.2 billion at 31 December 2017. This represents a year-on-year increase of €12.9 billion.

The Bank is continuing to keep its balances with central banks contained in the cash and cash balances item at a low level (€9.0 billion after €7.0 billion in 2016) due to the current interest rate policy. The Bank increased its cash on hand accordingly by €1.5 billion to €6.0 billion again in 2017. In the reporting year, there was a significant rise in the loans and receivables with banks. The Bank recorded an expansion in volumes of €22.1 billion to €58.0 billion, particularly through a deposit facility with the Deutsche Bundesbank existing over the record date. By contrast, there was a slight decrease in loans and receivables with customers. The volume fell by €1.3 billion to €93.2 billion. Key drivers in this context were lower cash loans (€8.9 billion compared with €10.1 billion in 2016) and a decrease in the syndicated loans extended by the Bank (€6.6 billion compared with €7.7 billion in 2016). The mortgage loans issued by the Bank developed in the opposite direction. Here, the Bank achieved an increase of €1.2 billion to €41.4 billion.

The holdings disclosed under securities (without held-for-trading portfolios) amounted to €48.7 billion (down €4.8 billion). This is primarily attributable to a decrease in the volume of bonds and notes issued by public-sector and third parties (down €4.7 billion and €1.7 billion respectively).

At €49.9 billion, assets held-for-trading were lower than the previous year's level of €54.5 billion. This figure contains fixed-income securities including changes in value of €16.2 billion, equity securities and other variable-yield securities including changes in value of €16.1 billion, receivables from securities repurchase transactions on the trading book of €4.3 billion, derivative financial instruments of €11.2 billion and other assets of €2.1 billion.

The shareholdings disclosed under participating interests and shares in affiliated companies came to €2.5 billion. In the financial year we sold our participating interest in F2i, Milan, Bankhaus Neelmeyer AG, Bremen and VBW Bauen und Wohnen GmbH, Bochum.

In the 2017 financial year, the Bank wrote up the full amount still outstanding of the omitted transitional allocation to the provisions for pensions. The effects are reflected under excess of plan assets over pension liabilities.

There was an increase in volumes on the liabilities side in line with the development on the assets side. The rise in deposits from banks (up €9.2 billion to €60.2 billion) is primarily attributable to a significant increase in term deposits (up €8.0 billion) and an increase in securities repurchase transactions (up €1.3 billion).

Deposits from customers rose significantly by €7.0 billion to €131.1 billion. The reason for this is particularly higher volumes of term deposits (up €5.6 billion), other liabilities (up €2.2 billion) while there were slight declines in registered mortgage bonds in issue and liabilities from collateral provided (down €0.4 billion respectively).

Debt securities in issue rose by €3.5 billion to €16.7 billion. The volume of liabilities held-for-trading contracted (down €4.6 billion to €27.3 billion). Subordinated liabilities came to €0.7 billion.

The shareholders' equity fell €1.7 billion to €16.7 billion compared with year-end 2016. The dividend payout of €3.0 billion based on a resolution adopted by the Shareholders' Meeting in the second quarter of 2017 was unable to be made up for by the net income of €1.3 billion generated in the reporting period. The subscribed capital, the additional paid-in capital and the retained earnings remained unchanged compared with the previous year.

The return on assets is defined in Section 26a KWG as the ratio of net profit to total assets. This amounted to 0.494% at 31 December 2017 (31 December 2016: 0.002%).

The contingent liabilities and other commitments not recognised in the balance sheet increased by €1.2 billion year-on-year to stand at €78.2 billion at 31 December 2017. This figure includes contingent liabilities (€36.4 billion) from general loan guarantees (€16.3 billion), transaction-related guarantees (€16.7 billion) and trading-related guarantees (€3.4 billion). Other commitments of €41.8 billion (previous year: €41.0 billion) consist solely of irrevocable lending commitments, which increased by €0.8 billion compared with the previous year.

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

The total risk-weighted assets of HVB (including market risk and operational risk) determined in accordance with Basel III requirements amounted to €77.2 billion at 31 December 2017 and were thus €0.2 billion higher than year-end 2016.

The risk-weighted assets for credit risk (including counterparty default risk) determined by applying partial use increased by €1.1 billion to €58.9 billion. Among other things, this increase arose on account of higher risk weights for consolidated subsidiaries.

The risk-weighted assets for market risk remained almost unchanged at €10.9 billion compared with year-end 2016.

The risk-weighted asset equivalents for operational risk came to €7.4 billion at 31 December 2017, thus decreasing by €0.9 billion compared with year-end 2016. This is partly due to the positive development of the risk profile of HVB.

At 31 December 2017, the Common Equity Tier 1 capital compliant with Basel III excluding hybrid capital (CET1 capital) and the Tier 1 capital of HVB amounted to €15.6 billion and was thus slightly higher than the amount at year-end 2016 (31 December 2016: €15.4 billion in accordance with approved annual 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 20.2% at 31 December 2017 in accordance with approved annual financial statements (year-end 2016: 20.0% in both cases). This increase is due to the slight rise in risk-weighted assets coupled with the slight rise in capital. Own funds amounted to €16.4 billion at 31 December 2017 (31 December 2016: €16.1 billion in accordance with approved annual financial statements). The own funds ratio was 21.2% at year-end 2017 (31 December 2016: 20.9%).

Business Situation and Trends (Continued)

To ensure sufficient liquidity at all times, key figures are used, among other things, which act as triggers. A bank's liquidity is evaluated using the liquidity ratio defined in the German Banking Act/German Liquidity Regulation (KWG/Liquiditätsverordnung – LiqV). This figure is the ratio of cash and cash equivalents available within a month to the payment obligations falling due in this period. Liquidity is considered adequate if this ratio is at least 1.00. At HVB, this figure had increased to 1.46 by the end of December 2017 after 1.15 at year-end 2016. A detailed description of the management of liquidity and the liquidity position is given in the section entitled "Liquidity risk" in the Risk Report. This section also describes the related liquidity coverage ratio according to Basel III used for measuring the Bank's ability to meet its short-term payment obligations.

The leverage ratio is determined by setting the core 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 in accordance with approved annual financial statements of HVB in accordance with the Commission Delegated Regulation (EU) 2015/62 amounted to 4.6% at 31 December 2017 (year-end 2016: 4.8%). The decline in the leverage ratio is attributable to the increase in the total exposure measure.

Ratings

The ratings of countries and banks are subject to constant monitoring by rating agencies. In recent years the implementation of new regulatory requirements (especially the Bank Resolution and Recovery Directive – BRRD) has resulted in an adjustment of the rating methods used by rating agencies. Consequently, the specification of the liability cascade in Germany (Section 46f KWG) has been effective since January 2017.

S&P responded to this specification by placing the counterparty credit rating of HVB (BBB) in March 2017 on "credit watch developing" and introducing the senior subordinated debt instrument rating. S&P assigned an initial rating of BBB- to the senior subordinated debt securities in order to take account of their subordinate ranking within the senior unsecured securities. The status "credit watch developing" shows that the rating can be upgraded, remain the same or downgraded depending on the details of resolution strategy of UniCredit Group. In November 2017, S&P upgraded the counterparty credit rating of HVB from BBB to BBB+. The improved rating followed the upgrade of UniCredit S.p.A. to BBB which, in turn, was caused by Italy also being upgraded to BBB. The reasons given by S&P for the upgrade were the upswing in the economy and a better environment for the banking system in Italy. The outlook remains unchanged at "credit watch developing". In this context, the rating for the senior subordinated securities of HVB was upgraded from BBB- to BBB.

In April 2017, Fitch Ratings adjusted the derivative counterparty rating, the issuer default rating and the deposit rating of HVB from A- to BBB+. By doing so, Fitch Ratings responded to the change in the ratings of UniCredit S.p.A. (BBB) which in turn was triggered by he downgrading of the Italian State to BBB. The outlook remains negative, as Fitch believes the fungibility of capital and liquidity could increase within banking groups under the direct supervision of the ECB. Fitch Ratings confirmed the ratings of HVB in December 2017.

In May 2017, Moody's confirmed the counterparty risk rating at A1. In this context, the A2 assessment for deposit rating and the senior-senior unsecured bank debt rating was affirmed. HVB's senior unsecured rating adjusted to Baa2 in May was confirmed in December 2017. However, the outlook was changed from stable to negative in this connection. Moody's believes that the negative outlook reflects the potentially lower likelihood of support from the government for subordinated senior unsecured securities of German issuers after the transposition of the BRRD amended in November 2017 into German law. The amendment of the BRRD requires that an EU-wide subordinated senior unsecured class of debtors is introduced which will serve to ensure a closer harmonisation of the liability cascades of banks within the EU. For German banks, this might result in the senior unsecured securities classified as subordinate in accordance with Section 46f KWG ranking pari passu with the newly introduced class of debtors.

Significant investments

In the 2017 financial year, investments were made mainly in the IT infrastructure, which primarily serve the purpose of digitalisation and the adjustment to stricter internal and external requirements. No significant investments were made beyond those apart from the investments required in the ordinary course of business.

Offices

Offices, broken down by region

		ADDITIONS	REDUCTIONS		
	1/1/2017	NEW OPENINGS	CLOSURES	CONSOLIDATIONS	31/12/2017
Germany					
Baden-Wuerttemberg	15	—	—	—	15
Bavaria	203	—	—	1	202
Berlin	8	—	—	—	8
Brandenburg	7	—	—	—	7
Hamburg	13	—	—	—	13
Hesse	8	—	—	—	8
Lower Saxony	10	—	—	—	10
Mecklenburg-Western Pomerania	4	—	—	—	4
North Rhine-Westphalia	9	—	1	—	8
Rhineland-Palatinate	14	—	—	—	14
Saarland	4	—	—	—	4
Saxony	8	—	—	—	8
Saxony-Anhalt	9	—	—	—	9
Schleswig-Holstein	35	—	—	—	35
Thuringia	5	—	—	—	5
Subtotal	**352**	**—**	**1**	**1**	**350**
Other regions					
Europe	**7**	**—**	**—**	**—**	**7**
France	1	—	—	—	1
Greece	1	—	—	—	1
UK	1	—	—	—	1
Italy	1	—	—	—	1
Austria	1	—	—	—	1
Switzerland	2	—	—	—	2
Africa	**1**	**—**	**—**	**—**	**1**
South Africa[1]	1	—	—	—	1
Americas	**2**	**—**	**—**	**—**	**2**
USA	2	—	—	—	2
Cayman Islands	—	—	—	—	—
Asia	**6**	**—**	**1**	**—**	**5**
Hong Kong	1	—	—	—	1
Singapore	1	—	—	—	1
Japan	1	—	—	—	1
United Arab Emirates[1]	1	—	1	—	—
South Korea[1]	1	—	—	—	1
Vietnam[1]	1	—	—	—	1
Subtotal	**16**	**—**	**1**	**—**	**15**
Total	**368**	**—**	**2**	**1**	**365**

1 representative offices

Business Situation and Trends (Continued)

Relations with affiliated companies

We have prepared a separate report on our relations with affiliated companies in the 2017 financial year which contains the following declaration made by the Management Board in accordance with Section 312 of the German Stock Corporation Act (Aktiengesetz – AktG):

"We declare that, based on the circumstances known at the time the legal transactions listed in this report were entered into, or the measures listed in this report were undertaken or omitted, UniCredit Bank AG received appropriate consideration for each transaction and did not suffer any disadvantage as a result of measures undertaken or omitted, or any disadvantages arising were compensated."

Report on subsequent events (events after the reporting period)

At its meeting on 16 February 2018, the Supervisory Board appointed Jan Kupfer and Dr Emanuele Buttà as members of the Management Board with effect from 1 March 2018. Mr Kupfer will be in charge of the Corporate & Investment Banking business segment and succeeds Dr Michael Diederich, who was appointed Board Spokesman of UniCredit Bank AG as per 1 January 2018. Dr Emanuele Buttà is taking over the Private Clients Bank business unit from Peter Buschbeck which together with the Unternehmer Bank business unit constitutes the Commercial Banking business segment of the Bank.

Forecast report/Outlook

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

General economic outlook

Growth in the global economy is likely to pick up again slightly in 2018. For the current year, the IMF expects a growth rate in global output of 3.9% compared with 3.7% in 2017. While the economic development in the USA will probably also pick up, it should contract slightly in the eurozone. The outlook for many emerging and developing countries, particularly for the CEE region (Central and Eastern Europe), will no doubt continue to be friendly again in 2018. On account of their high level of integration in global value chains, CEE EU countries in particular will benefit from the continuing recovery in world trade. A negative factor for the global economy is the weaker growth projected in China. Besides the ongoing transformation of the economy, this development can be attributed to stricter allocation guidelines for real estate loans and house purchases and the related process of normalisation in the Chinese real estate market. In addition, there is still uncertainty about global trade and the global economy due to the yet unforeseeable consequences of the Brexit decision and the current US administration in office under Donald Trump.

The US economy will make a significant contribution to global growth also in 2018. Not least thanks to supportive fiscal measures, we expect real GDP growth to come to 2.6% in the USA this year and thus be 0.3 percentage points higher than in the previous year. In this context, strong stimuli are expected to take effect probably around mid-year due to a lowering of income and corporate tax. Afterwards, however, growth will weaken towards the end of the year as the US economy is already in a late phase of a historically long upswing. A key growth driver will continue to be private consumption. But investment expenditure is also projected to respond positively in the short term to adjustments to tax rates and the possibilities of tax write-offs. As capacities in the US economy have by and large been fully utilised, the inflation and wage pressure should continue to gradually increase.

In the current year, we project 2.3% growth in the eurozone and thus expect a slight decline compared with 2017 (up 2.5%). While the trend in world trade should also support the economy in the eurozone in 2018, an ongoing appreciation of the euro and the expiring of favourable financing conditions are likely to have a slightly dampening effect. Growth in the eurozone is expected to once more be driven primarily by domestic demand in 2018. While consumer spending is not expected to expand any further on account of higher inflation rates (negative purchase power effect) and an already low savings rate, investments in the eurozone should be revived by the high liquidity and profitability of companies and a good development in world trade.

The ECB's bond-buying programme, which has been continued at a lower amount of €30 billion per month since January 2018 and is scheduled to last until the end of September 2018, or longer if necessary, will keep financing costs low also in 2018. We expect a slight increase to 1.6% in overall inflation in the eurozone for 2018 as a whole. In the United Kingdom, we anticipate much weaker GDP growth of 0.9% this year compared with the 1.8% increase in 2017.

At country level, we forecast a GDP growth rate in Germany of 2.3% in 2018 compared with 2.2% in 2017 (not adjusted for calendar reasons). At 1.8%, growth in France is projected to be slightly lower in 2018 than in the previous year (up 1.9%). In Italy, we likewise expect a slight decline in 2018 to 1.5% (2017: up 1.6%). In Spain, the economic recovery will also continue to weaken from around 3.1% in 2017 to around 2.7% in 2018.

Business Situation and Trends (Continued)

Domestic consumption and exports are likely to be the key drivers of German economic growth again in 2018. In this context, particularly manufacturing companies will benefit from the ongoing expansion in world trade. Furthermore, we expect the recovery in investments to continue and gain momentum. Private consumption should also record solid growth based on a historically low unemployment rate coupled with moderate wage increases. But the construction industry will no doubt once again contribute to growth in 2018, which is signalised by record levels in business expectations and a large backlog of completions in comparison with the building permits granted.

Sector development in 2018

In 2018, a key focus will be placed on the ECB's future policy. Market expectations are that the ECB will further reduce or phase out purchases in October 2018. Interest rates are not expected to be raised until after the purchase programme has ended in 2019. Even after the end of the monthly net purchases by the ECB, the central bank will continue to be a significant factor for the spreads and interest rate levels as maturities under the programme are reinvested in order to purchase assets.

Banks are making increasing progress in reducing impaired loans. Strong growth in Europe and a rise in interest rates will have a positive impact on the European banking sector in the medium term and result in a trend towards an increase in lending and higher interest margins. In addition, the reduction in impaired loans is expected to be continued, which will benefit from the consistently favourable macroenvironment, the continuous monitoring of this subject by the banking supervisory authorities and other measures of banks taken for reduction purposes.

Important regulatory topics in 2018 are likely to be the continued standardisation of creditor hierarchies of banks in Europe based on the French model, the topping up of the required TLAC and MREL ratios by issuing suitable debt instruments, IFRS 9 and preparations for the resolved Basel III reforms. In addition, the new Markets in Financial Instruments Directive (MiFID II) and the related Regulation on Markets in Financial Instruments (MIFIR) entered into effect on 3 January 2018.

The Basel III reforms were finally adopted in December 2017. A key topic is the agreed 72.5% output floor for internal models which restricts the calculation of risk-weighted assets using internal models and bases these more strongly on the standard approach. The output floor will be implemented in stages in the period from 2022 until 2027. Although no significant increase in capital requirements is expected overall for the global banking sector, the Basel III regulations will result in higher capital requirements for individual financial institutions. These institutions must gradually strengthen their capital base by 2027.

Furthermore, the German Federal Financial Supervisory Authority (BaFin) published the fifth amendment to the Minimum Requirements for Risk Management (MaRisk) on 27 October 2017, thus finalising the consultation procedure underway since February 2016. Among other things, the fifth MaRisk amendment includes improvements to risk data aggregation and risk reporting, and incorporates the Basel Committee's BCBS 239 standard into the MaRisk in this way. Furthermore, regulations on the risk culture, IT systems and outsourcing were specified and supplemented.

Development of HVB

On account of the persistently high level of uncertainty entailed in the macropolitical environment in Europe and the resulting high structural volatility of financial and capital markets, forward-looking statements on performance are very unreliable. Based on our business model and the assumption that the political and macroeconomic environment will remain relatively stable, we assume that, in a consistently challenging environment for the financial industry, we will again be able to generate a good profit before tax in the 2018 financial year, which however will be moderately lower than the already good result in the reporting period.

We are budgeting for operating income to be only slightly lower than the figure achieved in the 2017 financial year, which benefitted from a non-recurring effect in other operating income, in a persistently difficult market environment. It should be possible to once again significantly reduce operating costs compared with 2017 through the consistent implementation of our measures under the Transform 2019 programme and the continued application of our strict cost management, which has already been in place for many years. The cost-income ratio is thus also likely to remain at the level achieved in 2017 in the 2018 financial year. In terms of net write-downs of loans and provisions for guarantees and commitments, for which we reported a very low level in the reporting period, we expect these to normalise somewhat and thus increase significantly compared with 2017, but nevertheless remain at a moderate level.

We expect to continue to enjoy an excellent capital base in the 2018 financial year. The capital ratio for the Common Equity Tier 1 capital will fall moderately below the level seen in the reporting period as we anticipate a significant expansion in risk-weighted assets, particularly on the back of the planned increase in the lending and transaction volume and a rise in market risk.

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

The opportunities described below are offset by risks that are set against the exploitation of those opportunities and plans. The risks arising from the business policy and corporate strategy are described in the Risk Report.

HVB is an important part of one of the largest, best-positioned banking groups in Europe, UniCredit. It is one of the largest private financial institutions in Germany and has core competence for all UniCredit customers, products and markets in Germany. In addition, it is the centre of competence for the international markets and investment banking of UniCredit as a whole. HVB operates in a domestic market which is the largest in the whole of Europe in terms of economic power, population and the number of companies and upscale private customers. Moreover, Germany is one of the few countries in the world that continues to enjoy a financial rating of AAA. All in all, HVB can exploit its regional strength coupled with the opportunities that arise from the network of a leading European banking group for the benefit of its customers.

With a business policy geared to sustainability, an excellent capital base and the measures planned to boost efficiency and earnings in the Transform 2019 programme, HVB stands for innovation, reliability, stability and security. This results in the opportunities described below.

Business Situation and Trends (Continued)

The Commercial Banking business segment is notable for its universal bank offerings guaranteed to meet customers' needs to a high standard, particularly through the close cooperation between the business units in Commercial Banking and with the product specialists in Corporate & Investment Banking. The focus is placed on customers prepared to pay an appropriate price for premium services. Specifically, we see the following growth opportunities for each business unit:

Within the Commercial Banking business segment, the Unternehmer Bank business unit is seeking profitable growth in its corporate customer business through its positioning as a principal or core bank. At the same time, the Unternehmer Bank acts as a strategic business partner and premium provider that is heavily involved in the entrepreneurial activities of its customers. This means that the Unternehmer Bank responds to customers' demands and develops tailored solutions for them. The most important strategic challenges of customers include, among other things, foreign trade, internationalisation, digitalisation and corporate succession. The entrepreneur's private sphere is also a focal point of our comprehensive advisory services in the Wealth Management segment. For this reason, the growth initiatives of the Unternehmer Bank cover precisely these needs.

In the Private Clients Bank business unit, we were the first bank in Germany to have initiated a root-and-branch modernisation of our retail banking business. The path successfully taken to do so is being continued apace with systematic digitalisation and positioning as a quality provider. We are proactively focusing on discriminating customers seeking professional advice. Here we aim to actively increase our market share to improve the profitability of our retail banking operations. Among other things, this will be achieved by creating clear lines of demarcation between us and the competition, providing first-class individualised advisory expertise, offering a modern multichannel business model, loyalty pricing and accentuating our premium market presence which includes modern branches and a network of specialists. Private Banking is pursuing a clear growth strategy. The consistent use of the 360-degree comprehensive advisory approach illustrates our advisory and product expertise in the market which aims to sustainably increase the prosperity of our customers and thus maintain long-term, trusting customer relationships. Offerings on all aspects of private assets, a business model that has received external awards as well as innovative and customised products and services underscores our commitment to the quality that we provide to support our customers.

The strategic emphasis in the CIB business segment is on consistent risk-adequate pricing and enhancements in strategic customer transactions and investment banking solutions for a sustainable and long-term business relationship. An integrated value chain comprising network and product specialists enables us to provide top-drawer advice complete with solution-oriented approaches and wide-ranging financing and capital-procurement opportunities. We see further business potential in the expansion and improved use of our strong international network. To increase the efficiency of our customer-bank relations and thus enhance our cross-selling potential, we are expanding our processing and access platforms. We also wish to better exploit the opportunities afforded by digitalisation.

As a universal bank, HVB has a high level of cross-selling potential not only due to the close cooperation between the Private Clients Bank and the Unternehmer Bank as well as CIB but particularly due to the joint venture between the CIB business segment and the Unternehmer Bank business unit. As a result of the fully integrated CIB, Mittelstand customers in the Unternehmer Bank benefit from HVB's investment banking solutions. Furthermore, the Unternehmer Bank supports the internationalisation activities of its customers by assisting them in their outbound activities in the home countries of UniCredit Group. Besides Eastern and Western Europe, the Unternehmer Bank serves its customers in all regions of strategic importance. Extensive opportunities for new business also arise by providing support in subsequent situations. HVB can respond quickly and flexibly to expansion opportunities arising on the market. On account of its excellent capital base, it is already well equipped for any tightening of regulatory requirements and will be able to actively operate on the market even in that kind of scenario.

The recipe for success at HVB entails setting strict limits for risk and managing the Bank with an awareness of risk. This approach is set to continue going forward. The HVB portfolio is in very good shape in terms of risk content and can be considered less risky than most.

For years, HVB has been evolving into a bank with strong and consistent cost management. HVB is seeking to constantly enhance its operating costs over the coming years as well, partly by exploiting synergies released by the rationalisation of overlapping functions particularly in the context of its Transform 2019 programme. In this regard, we are making use of the opportunities to cooperate within UniCredit across country and company lines and applying best practices wherever they can be found. We aim to reinforce the end-to-end process view and improve the interaction between our internal processes by optimising our handling processes.

Digitalisation has greatly altered the finance industry and the expectations of customers with regard to their bank and will continue to do so going forward. Already today, HVB is pressing ahead with digital transformation in individual business areas and has applied diverse models in several areas of the Bank in terms of digitalisation/fintech.

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

We see further potential for opportunities in our long-term orientation to customers and other stakeholders.

We are part of a successful, pan-European commercial bank with a simple business model and a fully plugged in Corporate & Investment Banking, delivering a unique Western, Central and Eastern European network to our extensive client franchise.

Everything we do is based on our Five Fundamentals:

Our top priority, every minute of the day, is to serve our customers the very best we can (Customers First). To do this, we rely on the quality and commitment of our people (People Development), and on our ability to cooperate and generate synergies as “One Bank, One UniCredit” (Cooperation & Synergies). We take the right kind of risk (Risk Management) whilst being very disciplined in executing our strategy (Execution & Discipline).

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 as a risk-taking entity

By their very nature, the business activities of HVB are subject to risk. HVB 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 objectives 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 with the risks at HVB. The opportunities are presented separately in this Management Report entitled “Opportunities in terms of future business policy and corporate strategy, performance and other opportunities”.

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

We define **market risk** 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 interest net 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 not being able to obtain sufficient liquidity when required or that liquidity will only be available at higher interest rates, and the risk that the Bank will only be able to liquidate assets on the market at a discount.

In accordance with the Capital Requirements Regulation (CRR), HVB defines **operational risk** as the risk of losses resulting from flawed internal processes, systems, human error or external events. This definition includes legal risk but not strategic risk or reputational risk. Legal risk includes, but is not limited to, fines, penalties and damages resulting from supervisory actions, and settlements paid to private individuals.

These risk types are described in detail in the section entitled “Risk types in detail”. All other risk types of HVB are summarised in “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. No land or properties are included that are held as collateral in lending transactions.
- We define **business risk** 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 impact both the assets side and the liabilities side (pension commitments). This may be caused by a decline in the fair value of plan assets on the assets side due to disadvantageous changes in market prices as well as by an increase in the obligations on the liabilities side, due for instance to a reduction in the discount rate. Furthermore, actuarial risks such as longevity risk (changes to the mortality tables) may arise 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's equity interests. HVB's financial investment risk stems from the equity held in companies that are not consolidated in HVB and are not included in market risk, and the risk arising from small legal entities.
- **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.
- **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 other primary risks.

Integrated overall bank management

Risk management

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

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

Pursuant to the Minimum Requirements for Risk Management (MaRisk), multiyear budgeting is performed for 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 adverse scenarios are separately examined to permit an assessment of the impact of a deteriorating macroeconomic business environment. Whereas the first scenario assumes a setback in growth in major economies of the European Monetary Union, the second scenario assumes a conventional recession in Germany on account of falling demand for exports. 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 business segments are responsible for performing risk management, working closely with the CRO within the framework of competencies defined by the Management Board of HVB.

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 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". Thus they make it possible for the front office units to take on risk positions in a deliberate and controlled manner within the framework of the risk strategies and 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 front office units are authorised to take their own lending decisions under conditions set by the CRO organisation. The Trading Risk Management 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.

Risk Report (Continued)

Business risk is defined as losses arising from unexpected, negative changes in the volume of business and/or margins that cannot be attributed to other risk types. This means that controlling consists mainly of the planning of earnings and costs by the individual business segments, which the CFO organisation is responsible for coordinating. The relevant business segments are responsible for controlling the financial investments. The real estate risk arising from Group-owned property is controlled centrally by the Chief Operating Office (COO; until the end of July 2017 Global Banking Services – GBS) unit. HVB 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 (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. It is subdivided in accordance with risk types. The Market and Operational Risk unit performs the risk monitoring functions for the following risk types: market risk, 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), operational risk and reputational risk. In addition, the Market and Operational Risk unit also monitors the market risk components 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 and Operational 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 Credit Risk Control unit monitors the credit risk, the business risk and the real estate risk and merges these types of risk with the market risk and operational risk in order to determine the aggregate economic capital. For determining the internal capital requirement, the pension risk and the financial investment risk, including the risk for small legal entities, is added with 100% capital backing. Financial investment risk is monitored in the Credit Risk Control unit. 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. Parallel to these activities, 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.

Divisions and committees

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

The CRO organisation is divided into units that deal with lending business in the back office. The main functions of these units include:
– operational functions in the credit-decision and credit-monitoring processes for the risk-relevant lending business, complete with monitoring of the issuer and counterparty limits
– data management for the restructuring and workout portfolio
– restructuring activities with a view to minimising losses for the Bank

At the same time, there are units that cover operational and strategic aspects of risk monitoring. Their main functions include:

- the development, enhancement, parameterisation and calibration of the rating models used to determine the probability of our customers defaulting
- validation of Pillar I and II systems for risk measurement that contain the following components: models, associated processes, IT systems and data
- the development of concepts used to identify and control credit risk and concentrations, including country risk
- responsibility for the measurement methods and the refinement of the measurement methods and systems, and for the management and measurement of market risk, liquidity risk and operational risk
- responsibility for reputational risk and its management
- the determination of the internal capital and the economic capital base, and the performance of stress tests
- ensuring ICAAP compliance and compliance with the MaRisk rules as part of the responsibility for credit risk and economic capital
- ensuring compliance with regulatory rules regarding internal and external reports
- risk reporting

Chief Financial Officer

The Finance and Regional Planning & Controlling units from the Chief Financial Officer (CFO) organisation play a major role in risk monitoring. The Finance unit notably covers the management of short- and long-term liquidity at HVB (Asset Liability Management) acting in concert with the front office units and asset/liability management. Regional Planning & Controlling has also been tasked with central business management, cost controlling and equity capital management. This unit is also responsible for the creation and validation of the segment report in accordance with IFRS; it similarly has responsibility for the processes involved in preparing the income budgets and for the income projections. Furthermore, the segment-related controlling departments for all the segments apart from CIB come under this unit. Controlling of the CIB business segment is the responsibility of CIB Planning and Control. This department cooperates with Accounting to reconcile the net trading income.

Asset Liability Management

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

Internal Audit

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

Risk Committee

The Management Board has entrusted the following tasks to the Risk Committee (RC), subject to its management competence and its ultimate decision-making authority at any time:

- development and implementation of suitable policies and methods, especially for credit risk and credit portfolio management together with other risk topics
- discussion of and decision on strategic risk policy issues
  A submission is always made to the Management Board when required for legal reasons (such as to comply with the MaRisk rules).

The RC generally meets once a month. Each meeting of the RC has a different main topic – either risk management or risk governance.

RC meetings focusing on risk management concentrate on the analysis of the business performance and risk development, and the ensuing measures. Method and process issues are also discussed during risk-governance meetings alongside the risk strategy and the internal rules and instructions.

Risk Report (Continued)

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

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

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

Loan Loss Provision Committee
The Loan Loss Provision Committee (LLPC) is kept informed about developments in HVB's watchlist and restructuring/workout portfolio and takes decisions within HVB regarding:
- the submitted risk provision requests, where these lead to allowances in excess of €5 million resulting from the initial assessment or follow-up assessments entailing a material change in the risk assessment
- debt forgiveness in excess of a risk provision/forgiveness competence of €5 million
- internal impairments at HVB in excess of a competence value I of €250 million or greater than 5% of HVB's regulatory equity capital

Implementation of overall bank management

Strategy
The business strategy and the risk strategy define the key pillars of business and risk policy for HVB. The subsidiaries, outsourcing and information and communications technology (ICT) are incorporated in both the risk strategy and the business strategy. The HVB 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.

The HVB risk strategy is derived consistently from the business strategy, supplementing it with the relevant aspects of risk management. In this context, the HVB 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. In addition, 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 presents the risk appetite within the various industries.

The strategies approved by the Management Board are reviewed on both an ad hoc and a regular basis and, where necessary, modified.

Overall bank management
The management of HVB takes place within the framework of the overall bank management of HVB Group. 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 risk remains within the framework defined by the Management Board.

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 returns/profitability, growth, restrictions/limits and sustainability.

The profit-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 economic yield expectations 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, 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

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%. The expected return on investment is derived from the average used core capital.

Management of regulatory capital adequacy requirements

To plan our regulatory capital taking account of regulatory requirements, we apply the three capital ratios listed below, which are managed within HVB Group's risk appetite framework using internal targets, thresholds 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 core capital to total of risk-weighted assets from credit risks and risk-weighted asset equivalents from market risks and operational risks)
– equity funds ratio (ratio of equity funds to the sum of risk-weighted assets arising from credit risk positions and the equivalent risk-weighted assets arising from market and operational risk positions)

Essentially, the following processes have been defined to safeguard an appropriate capital base over the long term:
– carrying out of a rolling eight-quarter projection on a quarterly basis to provide an ongoing forecast of the capital ratios
– carrying out of quarterly stress tests of the regulatory capital ratios under various scenarios (details on the stress tests can be found in the section entitled "Stress tests", see also the section entitled "Consistent liquidation approach/going concern approach")

More details on how these regulatory equity ratios have developed are presented in the section entitled "Risk-weighted assets, key capital ratios, liquidity and leverage ratio of HVB" in the Financial Review of the present Management Report of HVB.

HVB and UniCredit S.p.A. agreed with the relevant regulators that HVB and HVB Group would not fall below an equity funds ratio of 13%. This agreement will remain in force until further notice. The equity funds ratio of HVB was 21.2% at the end of December 2017 (31 December 2016: 20.9%).

Economic capital adequacy

HVB determines its internal capital on a monthly basis. The internal capital is the sum of the aggregate economic capital for all quantified risk types (with the exception of liquidity risk), a premium for pension risk and financial investment risk (including the risk 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-reducing diversification effects are taken into account between the individual risk types. Since December 2016, HVB has been using 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 new model is based on a copula approach where the parameters are estimated using the statistical Bayesian method. Additional risks that are not included in the regular calculation of economic capital are quantified on a quarterly basis within the scope of a monitoring run and compared with the available financial resources.

Risk Report (Continued)

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

Internal capital after portfolio effects (confidence level 99.90%)

	2017		2016	
Broken down by risk type	€ millions	in %	€ millions	in %
Credit risk	2,806	33.0	2,916	34.6
Market risk	2,039	24.0	2,175	25.8
Operational risk	1,205	14.1	1,134	13.4
Business risk	312	3.7	318	3.8
Real estate risk	29	0.3	42	0.5
Aggregated economic capital	**6,391**	**75.1**	**6,585**	**78.1**
Financial investment risk	1,197	14.1	1,033	12.3
Pension risk	917	10.8	810	9.6
Internal capital of HVB	**8,505**	**100.0**	**8,428**	**100.0**
Available financial resources of HVB	**16,740**		**16,144**	
Risk-taking capacity of HVB, in %	**196.8**		**191.6**	

Internal capital has increased by a total of €77 million. One of the main reasons for this development is an adjustment to the method used for calculating the financial investment risk. The opposite effect is exerted by a refinement of certain aspects of the method used for calculating the economic capital for the market risk.

Since 30 June 2017, the assumption is no longer made that there are diversification effects between the types of risk with regard to financial investment risk. Instead the economic capital is added to the aggregated economic capital. However, this effect relating to aggregation only has a minor effect overall on the overall internal capital.

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

Risk appetite

HVB's risk appetite is defined as part of the annual strategy and planning process. The risk appetite metrics comprise specifications for risk responsibility and positioning, regulatory requirements, profitability and risk, and controlling of specific risks. 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, should the defined limits be exceeded.

Consistent liquidation approach/going concern approach

HVB normally controls its risk-taking capacity under a consistent liquidation approach (gone-concern approach). In other words, the risk-taking capacity spotlights HVB's ability to settle its senior liabilities. At the same time, appropriate figures are also defined for the regulatory core capital backing alongside targets, triggers and limits for the risk-taking capacity.

The going-concern approach (the assumption that operations will continue) is additionally allowed for by critically evaluating and incorporating as appropriate the results of the regular Bank-wide stress tests when defining targets, triggers and limits for both the risk-taking capacity and the regulatory capital backing.

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 a HVB recovery plan since 2015. For this reason, HVB works closely together 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 2017 and has been in effect since then.

Risk-taking capacity
In a monthly analysis of our risk-taking capacity, we measure our internal capital against the available financial resources. Furthermore, the risk-taking capacity is analysed across the defined multiyear period as part of our planning process.

HVB uses an internal definition for the available financial resources, which, like risk measurement, is based on a consistent liquidation approach. Under this approach, 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 equity funds (available financial resources). When determining the available financial resources, the available capital is viewed from an economic standpoint. In other words, the calculation is made in accordance with a value-oriented approach, under which shareholders' equity shown in the balance sheet is adjusted for fair value adjustments. Furthermore, intangible assets, deferred tax assets and effects of own credit rating are deducted and minority interests are only taken into account to the extent of the risk-bearing portion. At the same time, subordinated liabilities recognised as regulatory capital are included. The available financial resources at HVB totalled €16,740 million at 31 December 2017 (31 December 2016: €16,144 million).

With internal capital of €8,505 million, the risk-taking capacity for HVB is 196.8% (31 December 2016: 191.6%). This figure is much higher than the target HVB has set itself. The rise of 5.2 percentage points in comparison to 31 December 2016 for HVB is attributable to the increase in the available financial resources of €596 million or 3.7%, which has a greater impact than the slight increase in internal capital of €77 million or 0.9% in 2017. The increase in the available financial resources is the result of changes to several components but primarily of the positive development of the reserves recognised in the balance sheet and of regulatory recognition of the additional subordinated capital.

Limit concept
The risk limit system is a key component of the ICAAP at HVB. 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 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 and financial investment risk are included in the internal capital by means of a premium.

This system of limits reflects the business and risk strategies, taking into account the risk appetite and the available financial resources of HVB, 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 broken down by risk type. Based on the aggregate limit set for internal capital, the risk-taking capacity of HVB is ensured at all times. The correlation effects included in the internal capital cannot be influenced by the business segments. Consequently, economic capital limits adjusted for these effects from the perspective of HVB Group and the risk-type-specific limits are used for controlling purposes in the business segments.

Risk Report (Continued)

In order to identify any overshooting at an early stage, HVB 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 monthly 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 2017:
- Contagion scenario – focusing on political tensions in the EU
- Recession scenario – recession in Germany due to a massive decline in global demand
- Historical scenario – based on the 2009 financial crisis
  A second, stricter variant of the scenario additionally reflects the default of the financial intermediary with the highest stressed counterparty risk exposures.
- Protectionism, China slowdown and Turkey shock (Protectionism scenario) – 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 – rising interest rates in the eurozone

Taking account of macroeconomic developments over 2017, 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 STC on a quarterly basis and any measures required are presented to the RC and the Management Board. Both the risk-taking capacity of HVB and the minimum requirements for regulatory capital ratios 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.

The 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.

Concentrations of risk and earnings

Concentrations are accumulations of risk positions that react similarly 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 in customers and 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. Simple 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.

The risk management processes for concentrations have been optimised with regard to the connection 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 was started in February 2017. The existing and potential new risks were analysed and scrutinized by means of structured interviews with numerous decision-makers within HVB and by means of questionnaires, among other things. The outcome of the 2017 risk inventory was presented to the RC and HVB's Management Board in September 2017 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. 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. This involves providing information about the overall risk to the Management Board and to the RC of the Supervisory Board on a monthly basis, to the full Supervisory Board at least on a quarterly basis and also on an ad hoc basis. In addition, further monthly risk reports are created focusing on specific business segments, countries or industries, to be communicated to the RC and the units involved in risk management, among others.

Risk types in detail

Where minor developments affecting individual risk types have taken place, these are described under the risk type concerned.

1 Credit risk

Definition
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 of the contracting party, meaning it is no longer in a position to meet its entire contractual obligations. Credit risk comprises the following categories:
– Credit default risk (including counterparty risk and issuer risk)
– Country risk

Categories
Credit default risk
Credit default risk is considered to occur with regard to a specific contracting party when one or both of the following criteria are satisfied:
– The Bank assumes the contracting party is probably not in a position to meet its contractual obligation towards HVB as whole, without having to take recourse to measures like the sale of collateral (where present).
– The contracting party is more than 90 days in arrears in terms of a material receivable of HVB.

The credit default risk also encompasses counterparty risk and issuer risk.

Counterparty risk
Counterparty risk arises from the possible loss of value due to the default of the counterparty in trading activities (such as derivatives involving interest rates, foreign exchange, equities/indices, or other futures or derivative contracts). It is divided into the following components:
– Settlement risk: Settlement risk is defined as the risk that the counterparty fails to meet its delivery or performance obligation on the due date while the Bank has already paid the consideration.
– Pre-settlement risk: Pre-settlement risk arises from the risk that the Bank has to replace a transaction on the market under less favourable conditions following a default by the counterparty.
– Money market risk (cash risk): Money market risk consists in the risk that the counterparty does not repay loans (taken out in cash).

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

Risk Report (Continued)

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

- Sovereign risk (sovereign as counterparty): Sovereign risk is the risk of the central government or central bank (or any agency backed by the government) defaulting, irrespective of the currency in which the debt is issued.
- Transfer and conversion risk: Transfer and conversion risk is the risk that the government takes measures due to the inability or unwillingness to pay with the objective of limiting the transfer of capital and/or convertibility of the currency, which leads to losses. War and civil war can similarly lead to a lack of solvency. Transactions contain transfer risk when they represent cross-border business (from the standpoint of the office disbursing the loan) and are denominated in a foreign currency (from the borrower's standpoint). The borrower's credit risk is not classified as transfer risk; the transfer risk is measured separately.
  Delivery risk is included in transfer risk. Delivery risk is the risk of default on account of non-delivery caused by state intervention in the delivery contract or state-imposed delivery restrictions (in the case of project loans or commodity financing, for instance).

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

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

HVB's successful strategy implemented in recent years of strictly limiting risk and managing the Bank in a risk-conscious manner was continued again in 2017. By selectively writing new business, employing active portfolio management and making effective use of professional restructuring and workout capacity, HVB has evolved into a bank that has a lower than average risk profile for the industry. The goal for 2017 was to continue applying this strategy and maintaining the overall portfolio at a sustainable level.

Industry-specific controlling of credit risk had a positive effect. The details of industry-specific controlling are specified in the Industry Credit Risk Strategy. This strategy includes an assessment of the opportunities and risks for every industry, from which controlling signals and quantitative ceilings for new business are derived.

Active management of the exposure in the countries badly affected by the financial crisis also contributed to the positive development described. The strategy of HVB in its role as a universal bank was to concentrate on strong regional core markets like Switzerland, the UK, Belgium and France alongside the domestic market of Germany. The Spanish, Dutch and Scandinavian markets are primarily served by other UniCredit banks, with the exception of multinational core customers, who continue to be served by HVB. At the same time, the Markets unit in the CIB business segment will enter into credit risk and market risk subject to clearly defined standards in UniCredit's core countries as a result of the corporate function as UniCredit's investment bank.

Limit system

The credit risk strategy defines limits for risk metrics and risk types for individual portfolios. These are allocated at the following levels:
- HVB Group
- HVB
- business segments of HVB Group and HVB
- products and special portfolios (such as Leverage and Project Finance)

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

In order to avoid concentrations of risk in credit default risk, the following concentration limits and, where appropriate, target portfolios are used for controlling purposes:
- single-name concentrations
  The reference unit for setting limits on single-name concentrations are economic or legal borrower groups with an unsecured exposure of €50 million or more.
- industry concentrations
  The limits are set in the same way as for industry controlling as part of the risk management programme at HVB.
- concentration limits for countries and regions
  Exposures outside Germany are subject to the risk of a sovereign default and hence possibly related problems in the financial system. The concentration limit restricts the credit risk of all borrowers in a given country. Every country and region has been assigned a limit that reflects the risk appetite and the strategic orientation (overweight, underweight or neutral) of HVB.
  In addition, a limit is set for cross-border country risk exposure.

The utilisation of the individual limits is classified using a traffic light system:
- Green: limit utilisation is not above a defined trigger
- Yellow: limit utilisation is not above the limit but above the defined trigger
- Red: limit utilisation is above the limit

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

Credit risk reduction

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

For the reduction of credit risk, only such collateral is used as meets the requirements of the Advanced Internal Ratings Based (A-IRB) approach in accordance with Basel III. An essential point in the formulation of collateral agreements and internal processes is ensuring that the collateral is legally enforceable.

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

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

Risk Report (Continued)

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

Measurement

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

Probability of default (PD)

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

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

HVB master scale with PD bandwidths

HVB RATING CLASS	AVERAGE PD	LOWER PD BANDWIDTH	UPPER PD BANDWIDTH
1	0.03%	0.001%	0.048%
2	0.08%	0.048%	0.121%
3	0.19%	0.121%	0.306%
4	0.49%	0.306%	0.775%
5	1.23%	0.775%	1.961%
6	3.12%	1.961%	4.965%
7	7.90%	4.965%	12.570%
8	20.00%	12.570%	99.999%
8–/9/10	100%	100%	

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

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

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

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

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

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

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

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

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

Risk Report (Continued)

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

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

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

Monitoring and controlling

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

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

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

Quantification and specification

The economic capital for credit risk at HVB, without taking account of diversification effects between the risk types, amounts to €3,100 million, which is €221 million lower than the total reported value as at 31 December 2016 (€3,321 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 including issuer risk from the trading book. Issuer risk arising from the trading book is, moreover, 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 a mere €127 million (31 December 2016: €248 million).

Development of metrics by business segment

Business segment	Expected loss[1] in € millions 2017	Expected loss[1] in € millions 2016	Risk density in bps[2] 2017	Risk density in bps[2] 2016
Commercial Banking	132	135	14	15
Corporate & Investment Banking	137	145	10	12
Other/consolidation	2	3	69	68
HVB	**271**	**283**	**12**	**14**

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

In 2017, the expected loss of HVB fell by €12 million and risk density by 2bps. This development can be attributed mainly to an improvement in the portfolio structure in the CIB and Commercial Banking business segments.

In the CIB business segment, the expected loss decreased by €8 million and the risk density fell by 2bps, mainly due to the significant increase in the liquidity reserves in the rating class 1.

The reduction in the expected loss in the Commercial Banking business segment is primarily attributable to an improvement in the portfolio structure in the Real Estate industry group.

Breakdown of credit risk exposure by business segment and risk category

(€ millions)

Business segment	Credit default risk exposure 2017	Credit default risk exposure 2016	Of which counterparty risk 2017	Of which counterparty risk 2016	Of which issuer risk in banking book 2017	Of which issuer risk in banking book 2016	Of which issuer risk in trading book 2017	Of which issuer risk in trading book 2016
Commercial Banking	92,621	90,017	2,660	3,370	—	—	—	—
Corporate & Investment Banking	143,471	127,611	15,921	19,490	37,046	44,267	4,836	5,429
Other/consolidation	357	450	209	131	10	35	—	—
HVB	**236,449**	**218,078**	**18,790**	**22,991**	**37,056**	**44,302**	**4,836**	**5,429**

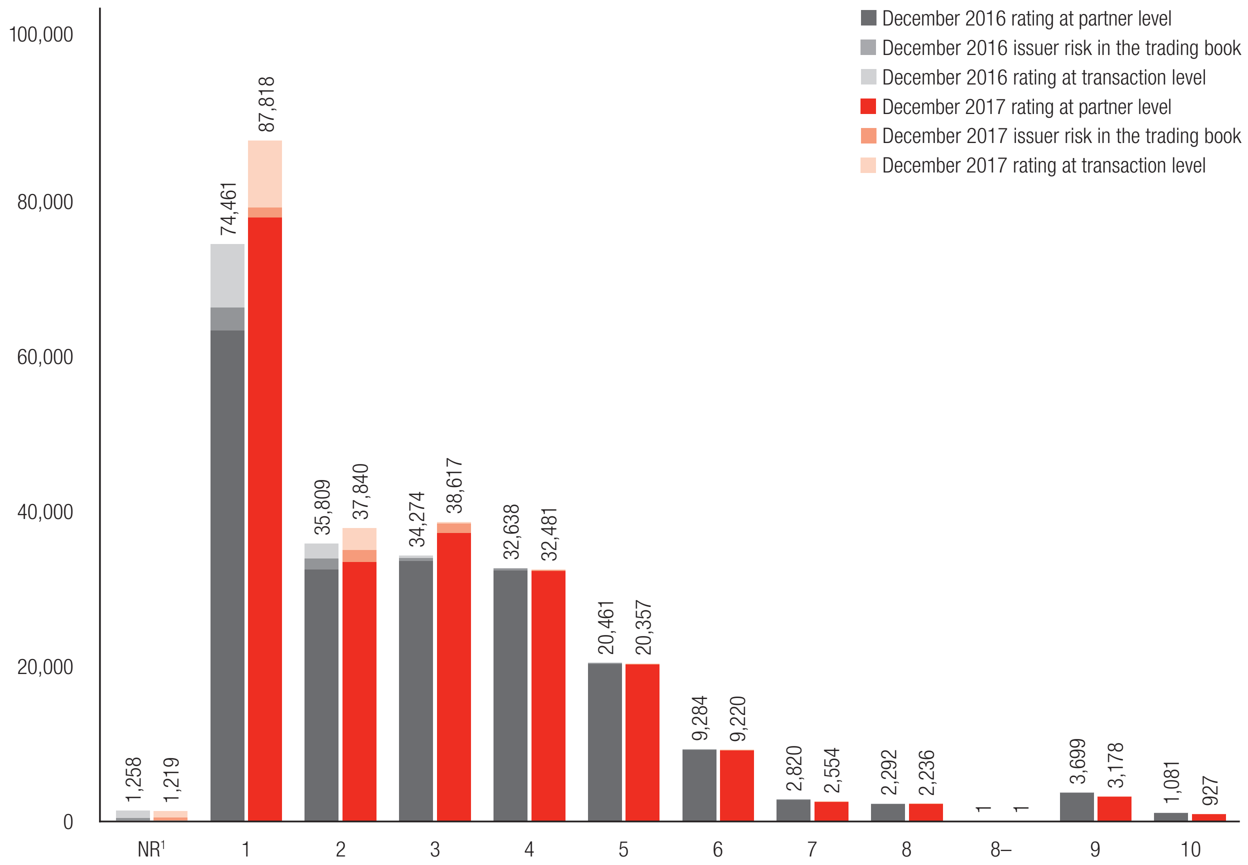
HVB's credit default risk exposure rose by €18,371 million in 2017.

In the CIB business segment in particular, the exposure rose by €15,860 million due to the increased investment of liquidity reserves in the financial institutions (including foreign sovereigns) industry group.

In the Commercial Banking business segment, exposure increased by €2,604 million, in particular on account of growth in business in the Real Estate industry group and in the retail customer business.

Risk Report (Continued)

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



1 not rated

The rating structure of HVB changed over the course of 2017 mainly on account of the business development in the financial institutions (including foreign sovereigns) industry group. In rating class 1 exposure increased by €13,357 million. This was caused primarily by the rise in HVB's liquidity investments.

Growth in business was also achieved in rating classes 2 and 3, specifically in the financial institutions (including foreign sovereigns), special products, and food, beverages, agriculture industry groups. The exposure to poorer rating classes saw a slight decline.

Development of metrics by industry group

	CREDIT DEFAULT RISK EXPOSURE € millions		OF WHICH ISSUER RISK IN TRADING BOOK € millions		EXPECTED LOSS[1] € millions		RISK DENSITY in BPS[2]	
Industry group	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Financial institutions								
(including foreign sovereigns)	70,525	49,266	3,178	4,187	29	26	4	6
Real estate	26,089	25,511	61	53	22	27	9	11
Public sector (including German sovereign)	25,229	31,281	411	205	1	2	1	0
Special products	12,888	12,308	0	2	7	9	5	8
Energy	11,139	11,931	218	205	15	17	15	15
Chemicals, pharma, healthcare	10,219	10,123	102	114	17	18	17	18
Food, beverages, agriculture	9,580	8,451	83	39	14	12	15	15
Automotive	7,328	7,073	118	86	7	8	9	12
Consumer goods, textile industry	6,284	5,792	58	39	12	13	20	23
Services	5,702	5,283	77	40	19	15	34	29
Metals	5,251	4,829	108	72	14	13	30	29
Construction, building materials	4,616	4,486	33	45	8	9	18	21
Machinery	4,569	4,423	18	17	12	9	28	20
Telecommunication, IT	4,442	4,219	180	132	9	9	21	23
Transport, travel	3,730	4,384	98	70	5	5	14	14
Shipping	3,337	4,579	5	1	42	54	188	181
Media, paper	2,037	2,004	22	20	4	3	18	17
Tourism	2,016	1,873	31	9	4	4	19	19
Electronics	1,998	1,887	29	86	2	2	13	13
Private customers	19,346	18,286	—	—	26	25	13	14
Others	124	89	6	7	2	3	200	335
HVB	**236,449**	**218,078**	**4,836**	**5,429**	**271**	**283**	**12**	**14**

1 expected loss of the performing exposure excluding issuer risk in the trading book
2 risk density as a proportion of expected loss to performing exposure excluding issuer risk in the trading book in bps; 100 bps = 1%

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

The greatest changes over the course of 2017 were seen in the following industry groups:

The exposure in the financial institutions (including foreign sovereigns) industry group increased by €21,259 million as at 31 December 2017. This development is exclusively due to the increase in liquidity investments held at Deutsche Bundesbank. Part of this figure was reallocated from the public sector (including German sovereign) industry group. The exposure to other customers of this industry group was subject to the usual business-related fluctuations over the course of the year and remained virtually unchanged. The increase of €3 million in the expected loss primarily stems from the adjustment to the method underlying the rating process for banks that now calculates significantly higher probabilities of default. The risk density decreased from 6bps to 4bps.

In the public sector (including German sovereign) industry group, the exposure decreased by €6,052 million in 2017. This is essentially attributable to the reallocation of maturing liquidity investments to the financial institutions (including foreign sovereigns) industry group as described above. The expected loss fell by €1 million, the risk density increased by around 1bps.

Risk Report (Continued)

Furthermore, the exposure to the food, beverages, agriculture industry group increased by €1,129 million and the expected loss rose by €2 million. Both developments mainly stem from the new business with individual key accounts. The risk density remained unchanged.

Details on individual selected industries relating to HVB are provided below.

Financial institutions (including foreign sovereigns)
Rising costs from regulatory requirements and in connection with compliance (fines and investments), together with falling earnings due to modified business models and less demand for credit, are leading to strong downward pressure on margins throughout the industry.

HVB 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 in the banking sector. A change in the exposure strategy will be adopted at short notice should bank downgrades be noted.

The provision of liquidity to banks is largely unproblematic. As a result of ECB policies, negative interest rates for deposits may be imposed in individual cases in the industry.

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

Real estate
The German real estate market saw a continuation of its boom phase once again in 2017. This development still has its origins in the historically extremely low long-term interest rates, the robust labour market and persistently strong demand for residential property and, in the meantime, also for commercial properties, especially in major conurbations. The change in investment patterns seen during the most recent financial crisis in 2008 led to large shifts of assets into real estate. Purchase prices often outstrip growth in rents. Counteracting effects can be identified in some regional sub-markets, due to demographic developments, among other factors. Market observers, including Deutsche Bundesbank, warn of potentially overinflating prices and overheating markets.

Unresolved international conflicts and uncertainty as to developments in the situation surrounding Europe could lead to worsening economic prospects in coming periods, which would have an impact on the commercial real estate market in particular. At the same time, the residential property market is showing indications of cooling and a normalisation of sales patterns following signs of overheating in the core markets (including Berlin, Hamburg and Munich), especially in the case of high-price properties.

Partly as a result of the conservative, forward-looking 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 2017. In terms of risk density, there was even a further improvement on the previous year. In a multi-year comparison, a very good risk result (measured against the actual loss) was once again achieved in the real estate industry group in 2017.

All in all, the real estate portfolio is expected to continue to grow in line with expected economic growth, taking into account the proven financing parameters. The financing business focuses on Germany.

Public sector (including German sovereign)
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 our own liquidity investments. The exposure is fluctuating within the industry limits defined for this industry.

Special products
Special products transactions include ABS/CDO bond investments, customer-related securitisations, securitisations of UniCredit's own assets, structured credit products such as bilaterally negotiated CDOs, structured fund financing, structured leasing transactions and other structured financial transactions (not including project financing, acquisition financing and leveraged finance).

A strategy of growth within clearly defined parameters involving conservative credit standards (e.g. asset classes, rating quality) was defined for sub-segments of the special products portfolio under the 2017 risk strategy. Although it was not possible to realise this growth in 2017 on account of the difficult market environment (the competitive situation, pressure on margins, among other factors) in one portfolio sub-segment, the overall volume of the special products portfolio increased by €597 million in comparison with December 2016. We are upholding the existing growth strategy for 2018. Non-strategic sub-portfolios continue to be reduced in a controlled manner. The expected loss and the risk density were successfully reduced once again in 2017.

Energy
In line with the defined risk strategy, we are focusing on large multinationals in the energy sector (including oil and gas). The exposure to companies that do not meet our financing conditions is being actively reduced or the risk mitigated by means of structural financing elements. 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.

Shipping
The industry situation improved overall in 2017, but is still not satisfactory in substantial areas.

The freight and time charter rates for bulk carriers stabilised at a higher level, following the historical lows in 2016. Container shipping also saw a slight recovery in time charter rates. However, these rates still do not cover the cost of capital. As a consequence of the increasing concentration of shipping lines, freight rates also increased compared with the equivalent period last year. Demand in the offshore industry suffered from the ongoing low price of oil. Accordingly, the demand for equipment for offshore oil exploration and extraction remained low.

Tankers for oil products and crude oil tankers alike recorded significant declines in freight rates in comparison with the previous year.

After the prices on the market for new ships and on the secondary market for ships stabilised at a low level at the beginning of 2017, prices have recently demonstrated different trends tracking the development of freight rates. While bulk carriers saw price increases, the vessel values for tankers were in decline in 2017. Container ships similarly experienced a slight recovery, but prices persist at a low level.

HVB 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 was continued in 2017 as planned, with the appreciation in the euro exchange rate against the US dollar recently providing support to this development. At the same time, however, new business was written very selectively where this helped to enhance the quality of the portfolio.

Acquisition finance in the core markets of HVB
Acquisition finance is included in the credit default risk exposure of the individual industry groups. The specific financing structures are controlled separately in line with the HVB risk strategy.

HVB's acquisition financing portfolio decreased slightly in 2017 in comparison with year-end 2016. New transactions were not able to fully make up for the decrease in the existing portfolio (downward pressure not only came from scheduled repayments but also instances of premature refinancing on the capital market). The portfolio quality (measured in terms of expected loss and risk density) remains at an acceptable level and comfortably within the defined limits.

Risk Report (Continued)

In new acquisition finance business, HVB continues to concentrate on consortium-leader mandates. The aim is to reinforce the leading market position in Germany. The plans are to increase market shares in the UK, France, Benelux and Scandinavia.

Exposure development of countries/regions
The following tables show the comprehensive concentration risk at country level. The exposure figures are shown with regard to the risk country of the customer.

Development of credit default risk exposure of eurozone countries

(€ millions)

	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
Country	2017	2016	2017	2016
Germany	151,440	129,695	1,092	744
Italy	9,336	7,860	1,567	1,049
Spain	6,911	7,281	126	93
France	6,181	7,118	257	317
Ireland	6,046	4,654	46	70
Luxembourg	5,487	4,320	98	74
Netherlands	4,126	4,806	171	193
Austria	1,849	3,236	304	1,457
Finland	330	230	21	27
Belgium	319	986	94	63
Greece	237	275	—	1
Cyprus	157	220	1	6
Portugal	48	93	3	37
Slovenia	44	87	22	17
Malta	17	34	—	—
Lithuania	16	13	16	12
Slovakia	7	26	2	24
Estonia	2	0	2	—
Latvia	2	15	—	—
Supranational organisations and multilateral banks[1]	2,057	3,535	—	249
HVB	**194,612**	**174,484**	**3,822**	**4,433**

1 In 2017, separate limits were set for the exposure to supranational organisations and multilateral banks which is disclosed in the category of supranational organisations and multilateral banks. The figures as at 31 December 2016 were calculated back correspondingly.

The exposure developed within the framework set by the risk strategy for 2017. This was specifically true in light of the stabilisation seen to date in the eurozone economy. The greater uncertainty engendered by Brexit could, however, have a negative impact on this. HVB will keep a close eye on this development and, if necessary, take suitable measures.

Italy
The size of the portfolio results from HVB's role as group-wide centre of competence for the markets and investment banking business of UniCredit. This portfolio is actively managed in accordance with market standards (such as collateralized derivative transactions). The exposure to Italy also includes the exposure with UniCredit S.p.A., for which a separate strategy was defined. Italy's economic growth continued to strengthen in 2017. Driven by consumer spending, which gathered pace partly due to positive developments on the labour market thanks to past reforms, real GDP growth should amount to 1.6% for 2017 seen as a whole. Similar dynamics are expected for 2018, which, in conjunction with the ongoing budgetary caution, should also lead to a slight decrease in the high level of sovereign debt measured in percent of GDP. The parliamentary elections scheduled for spring 2018 are not expected to cause any long-term disruption to the generally positive economic development as the Movimento 5 Stelle (Five Star Movement) protest party is unlikely to participate in any new government despite its relatively strong poll results.

Luxembourg

The absolute amount of the exposure is attributable mainly to the subsidiary in Luxembourg, where some German corporate banking transactions are also booked, together with exposure to multinational organisations.

Development of the weaker eurozone countries

The strict austerity measures and reforms imposed by some eurozone countries have been successful, also leading to a generally better assessment by the capital markets. Spain in particular should be highlighted in this respect, in that it was able to record strong growth once again for 2017. In addition, Spain has achieved a significant decrease in the level of unemployment and a gradual but persistent reduction in the sovereign debt ratio since 2015. The political crisis in connection with the secessionist movement in Catalonia is a factor causing uncertainty but has not yet had any major impact on the Spanish economy.

The portfolio in the weaker eurozone countries was again actively managed in 2017, albeit with different strategies.

The strategy of reduction continued to be applied for Greece in 2017.

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

	CREDIT DEFAULT RISK EXPOSURE		OF WHICH ISSUER RISK IN TRADING BOOK	
Region/country	**2017**	**2016**	**2017**	**2016**
UK	9,184	10,608	249	160
USA	8,853	10,238	161	225
Switzerland	5,418	4,917	142	84
Asia/Oceania (without Japan, China, Hong Kong)	3,615	3,777	25	25
Turkey	2,441	2,498	5	22
Western Europe (without Switzerland, UK)	1,728	1,841	104	179
Near/Middle East[1]	1,686	1,576	0	0
North America (including offshore jurisdictions, without USA)	1,615	1,276	63	50
China (including Hong Kong)	1,593	1,791	0	0
Japan	1,477	853	0	9
Eastern Europe (without eurozone countries)	1,412	1,195	145	166
Africa[1]	1,149	1,347	10	24
CIS/Central Asia (without Turkey)[2]	1,007	1,082	86	22
Central/South America	644	595	23	30
Without country classification[3]	15	—	—	—
HVB	**41,837**	**43,594**	**1,013**	**996**

1 Until 31 December 2016, the North Africa region was included in the Near/Middle East/North Africa region. When the 2017 risk strategy came into effect, the North Africa and Southern Africa regions were merged into the new Africa region. The comparative data as at 31 December 2016 were adjusted accordingly.
2 When the risk strategy for the year 2017 came into effect, Russia became part of the CIS/Central Asia (without Turkey) region for presentation purposes. The figures as at 31 December 2016 were calculated back accordingly.
3 The item "without country classification" was introduced when the risk strategy for 2017 came into effect. These transactions were presented under Germany until 31 December 2016.

The total exposure to countries/regions outside the eurozone decreased by €1,757 million in 2017, with the UK and the USA, in particular, demonstrating decreasing exposure.

Brexit
HVB is taking account of the possible consequences of Brexit in terms of the future development of its exposure in the UK, among other things.

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.

In Syria and Iraq, the so-called Islamic State has to a great extent been defeated by militarily means. Nevertheless, both countries remain embroiled in severe internal conflicts.

The Turkish economy has come under pressure primarily from the domestic policy issues since the failed coup d'état in the summer of 2016. In particular, the foreign portfolio investments that financed the country's large current account deficit to date could significantly and permanently decrease in the medium term. This will apply especially in an environment of gradually rising US interest rates which is likely to make investments in emerging economies, such as Turkey, relatively less attractive.

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, political risks arise from the confrontation between several Gulf States including Saudi Arabia and Qatar.

In the Asia/Oceania region, the confrontation between the North Korean leadership and the USA is a growing cause for concern. The actual triggering of armed conflict would be catastrophic for the region but this remains unlikely for the time being.

Financial derivatives
Alongside the goal of generating returns, derivatives are employed to manage market risks (in particular, risks arising from interest-rate fluctuations and currency fluctuations) resulting from trading activities, 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 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 at 31 December 2017 totalled €59.0 billion (31 December 2016: €76.1 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's derivative business results in risk-weighted assets arising from counterparty risk of €4.8 billion as at 31 December 2017 (31 December 2016: €5.2 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.

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	2017	2016	2017	2016	2017	2016
Interest rate derivatives	**633,326**	**850,343**	**784,086**	**2,267,755**	**2,066,289**	**48,244**	**60,988**	**44,136**	**57,880**
OTC products									
Forward rate agreements	42,402	—	—	42,402	67,869	2	5	2	2
Interest rate swaps	491,432	765,582	684,252	1,941,266	1,705,298	44,089	57,257	39,234	50,012
Interest rate options									
– purchased	7,212	36,319	52,845	96,376	106,788	3,467	3,507	383	195
– written	10,369	38,845	46,989	96,203	99,813	435	153	4,254	5,736
Other interest rate derivatives	22	29	—	51	310	—	65	1	68
Exchange-traded products									
Interest rate futures	33,299	9,568	—	42,867	47,641	—	—	—	1,867
Interest rate options	48,590	—	—	48,590	38,570	251	1	262	—
Foreign exchange derivatives	**269,246**	**34,208**	**6,215**	**309,669**	**327,049**	**3,511**	**5,424**	**3,832**	**6,011**
OTC products									
Foreign exchange forwards	223,975	22,635	1,003	247,613	263,711	3,027	4,667	3,211	5,211
Foreign exchange options									
– purchased	22,206	5,823	2,678	30,707	31,780	343	597	175	161
– written	22,801	5,750	2,534	31,085	31,554	132	160	446	639
Other foreign exchange derivatives	262	—	—	262	—	9	—	—	—
Exchange-traded products									
Foreign exchange futures	2	—	—	2	4	—	—	—	—
Foreign exchange options	—	—	—	—	—	—	—	—	—
Cross-currency swaps	**43,662**	**93,174**	**44,867**	**181,703**	**191,581**	**4,405**	**6,545**	**3,948**	**6,801**
Equity/index derivatives	**43,515**	**33,272**	**10,655**	**87,442**	**78,942**	**2,111**	**2,251**	**2,914**	**3,186**
OTC products									
Equity/index swaps	6,211	5,920	636	12,767	9,994	160	204	163	302
Equity/index options									
– purchased	3,399	1,778	838	6,015	5,338	251	377	190	152
– written	13,716	7,934	4,458	26,108	26,930	70	58	593	641
Other equity/index derivatives	440	259	505	1,204	194	34	17	1	0
Exchange-traded products									
Equity/index futures	6,079	1,242	273	7,594	5,667	9	5	9	5
Equity/index options	13,670	16,139	3,945	33,754	30,819	1,587	1,590	1,958	2,086
Credit derivatives[1]	**11,438**	**27,687**	**1,606**	**40,731**	**56,205**	**385**	**671**	**443**	**556**
Other transactions	**8,215**	**3,901**	**422**	**12,538**	**13,389**	**375**	**438**	**530**	**624**
HVB	**1,009,402**	**1,042,585**	**847,851**	**2,899,838**	**2,733,455**	**59,031**	**76,317**	**55,803**	**75,058**

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

Derivative transactions with a residual maturity of up to three months accounted for a nominal total amount of €559,591 million as at 31 December 2017 (thereof credit derivatives: €1,584 million).

Risk Report (Continued)

Derivative transactions by counterparty type

(€ millions)

	FAIR VALUE			
	POSITIVE		NEGATIVE	
	2017	2016	2017	2016
Central governments and central banks	7,086	7,034	1,307	1,560
Banks	29,990	41,205	32,850	45,289
Financial institutions	19,704	24,589	19,697	25,945
Other companies and private individuals	2,251	3,489	1,949	2,264
HVB	**59,031**	**76,317**	**55,803**	**75,058**

Credit derivatives

(€ millions)

	NOMINAL AMOUNT					FAIR VALUE			
	RESIDUAL MATURITY			TOTAL		POSITIVE		NEGATIVE	
	UP TO 1 YEAR	MORE THAN 1 YEAR UP TO 5 YEARS	MORE THAN 5 YEARS	2017	2016	2017	2016	2017	2016
Banking book	**—**	**25**	**—**	**25**	**171**	**—**	**1**	**—**	**2**
Protection buyer									
Credit default swaps	—	25	—	25	171	—	1	—	2
Total return swaps	—	—	—	—	—	—	—	—	—
Credit-linked notes	—	—	—	—	—	—	—	—	—
Protection seller									
Credit default swaps	—	—	—	—	—	—	—	—	—
Total return swaps	—	—	—	—	—	—	—	—	—
Credit-linked notes	—	—	—	—	—	—	—	—	—
Trading book	**11,438**	**27,662**	**1,606**	**40,706**	**56,034**	**385**	**670**	**443**	**554**
Protection buyer									
Credit default swaps	5,621	12,276	691	18,588	25,736	14	144	356	347
Total return swaps	—	285	—	285	150	2	—	35	27
Credit-linked notes	391	1,938	165	2,494	1,738	6	16	29	18
Protection seller									
Credit default swaps	5,221	12,533	743	18,497	25,814	361	360	23	160
Total return swaps	—	—	—	—	—	—	—	—	—
Credit-linked notes	205	630	7	842	2,596	2	150	—	2
HVB	**11,438**	**27,687**	**1,606**	**40,731**	**56,205**	**385**	**671**	**443**	**556**

Credit derivatives by reference asset

(€ millions)

	NOMINAL VOLUME				
	CREDIT DEFAULT SWAPS	TOTAL RETURN SWAPS	CREDIT-LINKED NOTES	TOTAL 2017	TOTAL 2016
Public sector bonds	16,878	—	189	17,067	25,896
Corporate bonds	18,558	—	3,006	21,564	25,260
Equities	—	—	—	—	—
Other assets	1,674	285	141	2,100	5,049
HVB	**37,110**	**285**	**3,336**	**40,731**	**56,205**

Single-name credit derivatives make up 49.7% of the total; multi-name credit derivatives, relating notably to baskets or indices, account for a share of 50.3%.

Stress tests

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

Summary and outlook

The Bank has put a strong focus on growth with simultaneous risk control in its business strategy. The goal is still to retain a low-risk credit portfolio within the relevant peer group.

In light of the difficult and ever-worsening market situation and tough competition, it will be even more challenging to achieve the growth targeted for 2018 than it already was in 2017.

The numerous economic and geopolitical uncertainties continue to weigh down on the overall economic environment.

2 Market risk

Definition

We define market risk 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 changes in credit ratings of securities (specific price risk for interest net positions).

Categories

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

Foreign currency risk arises from fluctuations in exchange rates.

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

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

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

Strategy

Our market risk is essentially managed by the CIB business segment. As was already the case in previous years, the focus in 2017 was again on customer transactions. This made it possible to avoid material losses arising from sudden, large market movements.

The trade in financial instruments was restructured in 2017 with a view to boosting its efficiency. The CEE ("Central and Eastern Europe") trading department was dissolved. The individual units of this department were allocated to interest rate trading, credit trading, foreign exchange trading and treasury. The trading departments for equity derivatives and commodity products were merged. A new trading department, FIC ("interest-bearing securities and currencies") was set up by merging interest trading, foreign exchange trading and credit trading. This created a clearer separation between strategic investments in the area of lending and trading. Within the new trading departments, teams were reorganised with a view to boosting efficiency.

Foreign exchange trading with Asian, Eastern European and Latin American currencies has been globally positioned. Currency options trading was strengthened. Currency trading on electronic platforms saw significant customer growth. Further expansion of these platforms is planned for the next few years. Similarly, there was significant growth in sales of shares through electronic platforms in Germany and Italy; some 160,000 different products are currently on offer in Germany.

Risk Report (Continued)

Around one third of the market risk is in trading books while around two thirds – mainly invested in interest-bearing-securities – lie in strategic investments or in liquidity reserve portfolios. All positions exposed to market risk are subject to corresponding limits.

Limit system

All transactions exposed to market risk in the trading and banking books of HVB are aggregated every day to form value-at-risk (VaR) metrics and set against the risk limits. The Management Board of HVB approves and, if necessary, adjusts the risk limits every year. Limits are defined for trading books by using VaR limits, whereas limits are set for the combination of trading and banking books by total VaR limits. Both groups of limits are equally binding and compliance is equally enforceable.

The overall VaR limit of €90 million and the trading book limit of €37 million were confirmed without change at the beginning of 2017 when the risk strategy for HVB Group was adopted.

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

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

Measurement

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

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

HVB has defined several further market risk metrics under the current CRR rules for risk management as well as the VaR:

– The stressed VaR is calculated in the same way as the VaR, although the 12-month observation period has been selected covering the most significant negative market changes for HVB's trading portfolio. The amount calculated for the regulatory report relates to a holding period of ten days and a confidence level of 99.00%.
– The incremental risk charge (IRC) for credit-risk-sensitive positions is the internal approach used to determine the specific risks (specific price risk for net interest positions). This includes credit default risk and migration risk, meaning that both the change in ratings (migration) and the potential default on a credit product are taken into account. The calculated amount for both regulatory and internal reporting relates to a holding period of one year and a confidence level of 99.90%.
– The specific risks for securitisations and nth-to-default credit derivatives are covered by the regulatory Standard Approach.
– Based on the CRR regulations, we calculate risks with regard to the credit valuation adjustment (CVA). The CVA risk shows the risk of fair value losses based on changes in the expected counterparty risk for all relevant OTC derivatives under CRR. We use our own internal model to calculate the vast majority of the CVA. For the regulatory report, the internal model calculates both the CVA VaR and the stressed CVA VaR on the basis of a 10-day holding period and a confidence level of 99.00%.

Monitoring and controlling

The market risk positions in the trading and banking books are monitored using a hierarchical limit system that restricts the potential loss from market risk. This involves restricting the VaR totals from trading positions by setting trading book limits. At the same time, all positions, irrespective of the regulatory or IFRS classification, are limited by what are known as VaR warning levels.

The VaR figures are reported daily along with the limit utilisation and the earnings figures (P/L figures) to the Management Board and the responsible persons in the CIB business segment. Whenever trading-book and/or total VaR limits are exceeded, an escalation process is triggered immediately and the reduction of the positions in question monitored. In 2017, such reduction was, with a few exceptions, carried out within one day. If the specified limit was exceeded on the following day as well, the escalation process was again initiated immediately.

The Market Risk Management department has direct access to the front-office systems used in trading operations. The monitoring of trading activities comprises prompt allocation to credit risk limits and detailed checks of the P/L on the following day. In this context, both the daily turnover and the P/L generated on intraday transactions are calculated.

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

To calculate and allocate the economic capital requirements for market risk, the hypothetical distribution used to determine the VaR has been expanded to an observation period of (at least) six years and combined with the results arising from the CVA risk. Unlike in internal risk controlling, any hedge effect of the model book for equity is not included in the economic capital. Furthermore, market risks are also included that arise from the Incremental Default Risk Charge (IDRC), which in contrast to the regulatory IRC approach only takes account of issuer default, the market risk Standard Approach, add-ons for ABS risks and for gap option risks. All risks, with the exception of the add-ons, are scaled accordingly to obtain a holding period of one year and a confidence level of 99.90%. In the course of a hypothetical resolution, it is assumed that tradeable positions are sold or hedged within the one-year holding period.

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

Simulation of interest income

In addition, a simulation of net interest income in the banking book is carried out for HVB 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 the sensitivity of net interest income 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, net interest income would increase by €145 million (30 June 2017, plus 100bps: €99 million) by taking into account elasticity assumptions for sight and savings deposits. A parallel interest rate shock of minus 30bps for transactions in euros and other foreign currencies combined with minus 100bps for other currencies in US dollars and British pounds would reduce net interest income for the same period by €76 million (30 June 2017, minus 30/minus 100bps: minus €67 million). Depending on the contractual agreement with the customer a floor of 0.0% could be employed for commercial banking products, meaning that the interest shock of minus 30/minus 100bps is not fully applied.

The resulting sensitivity analysis was carried out on the basis of the planned net interest income for the 2017 financial year. The change in earnings as of mid-year can be explained by the changed market conditions 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.

Risk Report (Continued)

The main target of the strategy in the interest rate risk in the banking book is the reduction of net interest income volatility over several years. 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 balance the trade-off between a stable flow of earnings in a multi-year horizon and the opportunity cost of having a fixed interest rate. The interest rate management strategy takes into account the potential impact from premature repayments, which is estimated on the basis of historical premature repayment 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 the customers independently of the level of the interest rates. The interest-rate-sensitive premature repayments are rather low at the current level of interest rates and are hedged using swaptions. The non-interest rate sensitive premature repayments are hedged using swaps according to the interest rate risk strategy of the bank.

Quantification and specification

Since June 2017, the economic capital for market risk has been calculated using a method that has been refined in certain points. The economic capital for market risk at HVB, without taking account of diversification effects between the risk types, amounts to €2,343 million and has changed hardly at all in comparison to the figure as at 31 December 2016 (€2,488 million). The decrease is essentially due to the aforementioned refinement in the method used.

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 (VaR, 99.00% confidence level, one-day holding period) (€ millions)

	AVERAGES					PERIOD-END TOTALS	
	2017	Q4 2017	Q3 2017	Q2 2017	Q1 2017	31/12/2017	31/12/2016
Credit spread risks	6	6	6	5	5	6	4
Interest rate positions	5	4	4	4	7	5	11
Foreign exchange positions	3	2	3	3	4	3	4
Equity/index positions[1]	3	3	2	3	3	3	2
HVB[2]	**7**	**7**	**7**	**8**	**7**	**7**	**9**

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

The regulatory capital requirements for the last year are described below, broken down by the relevant risk metrics.

Regulatory capital requirements of HVB (€ millions)

	31/12/2017	30/9/2017	30/6/2017	31/3/2017	31/12/2016
Value-at-risk	90	104	143	147	198
Stressed value-at-risk	251	285	284	277	286
Incremental risk charge	319	249	268	219	168
Market risk Standard Approach	7	8	1	1	1
CVA value-at-risk	29	31	37	46	48
Stressed CVA value-at-risk	153	150	148	151	157
CVA Standard Approach	26	32	31	15	16

The stricter regulatory capital requirements in HVB's market risk Standard Approach reported since September 2017 resulted from the extension to include specific interest rate risks for undertakings for collective investment (UCI) and from foreign currency risks for HVB's UCIs.

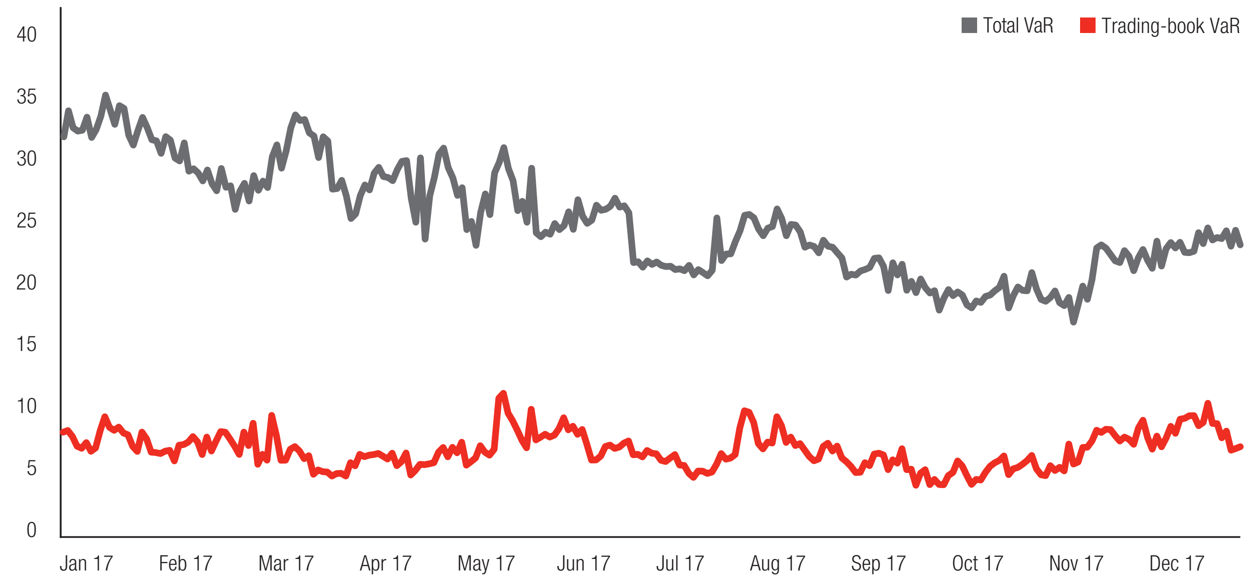
Alongside the market risk relevant for regulatory reporting, further market risk arises from positions in the banking book. All transactions exposed to market risk in the trading and banking books of HVB are consolidated for the purpose of risk controlling. Most of the market risk arises from positions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

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

	AVERAGES					PERIOD-END TOTALS	
	2017	Q4 2017	Q3 2017	Q2 2017	Q1 2017	31/12/2017	31/12/2016
Credit spread risks	23	21	23	22	24	20	23
Interest rate positions	7	5	6	8	12	5	15
Foreign exchange positions	9	6	8	10	11	6	11
Equity/index positions[1]	3	3	2	3	3	3	3
HVB[2]	**25**	**21**	**23**	**27**	**31**	**24**	**33**

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.

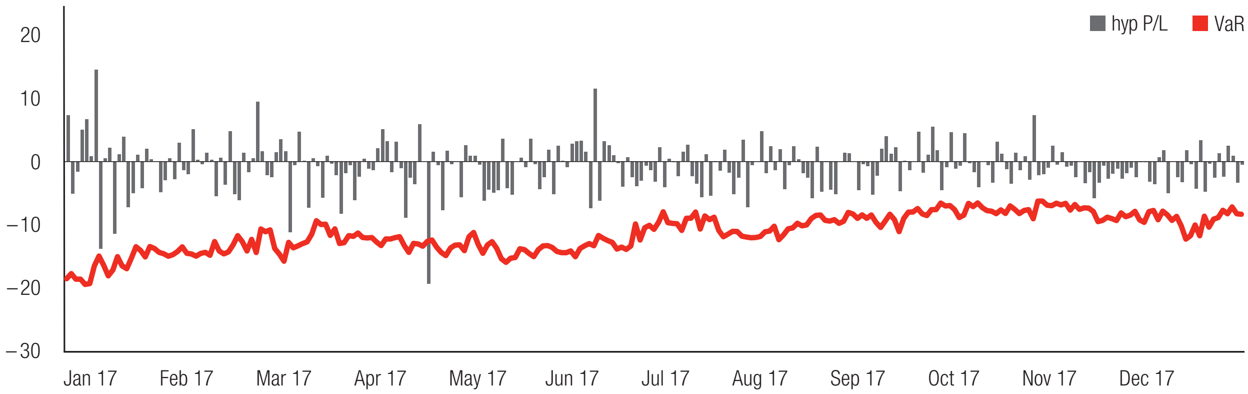
Development of trading-book and total value-at-risk at HVB (€ millions)



The total VaR at HVB 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 curve and the trading-book VaR curve show a relatively stable risk development in 2017.

Regulatory back-testing of the internal model at HVB for 2017 (€ millions)



The forecasting quality of the VaR measurement method is checked by means of regular back-testing that compares the calculated regulatory VaR figures with the hypothetical fair value changes calculated from the positions. One reportable back-testing outlier was observed in 2017. 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 2017"). This outlier stemmed mainly from significant movements in the euro/US dollar exchange rate, triggered by the outcome of the presidential election in France.

Alongside back-testing using the hypothetical change in value (hyp P/L), HVB also uses a back-testing method based on the economic P/L to validate the model. No limits were exceeded in 2017.

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.

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 the extreme case, HVB 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.

Greater volatility on the financial markets could also make it more difficult for HVB to establish a value for some of its assets and exposures. Significant changes to the fair values of such assets and exposures that might prove to be much lower than the present or estimated fair values could be a further consequence. All of these factors could force HVB to recognise amortisation charges or impairment losses, which would have a negative effect on its financial position and operating result.

Stress tests

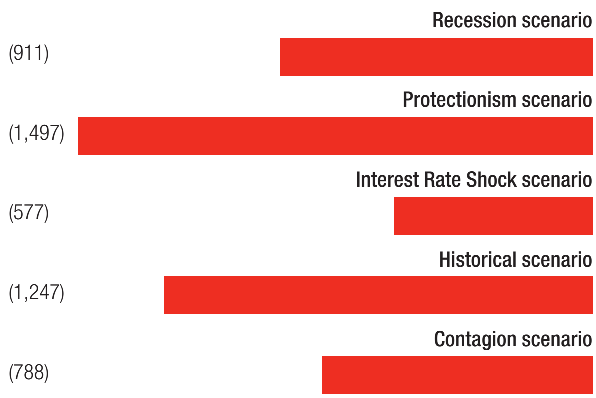
In addition to calculating the VaR and the other risk metrics, we regularly conduct stress tests to determine the potential losses in our market risk positions resulting from extreme market movements and extraordinary events. The scenarios we examine range from large movements in interest rates, currency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

To evaluate on a regular basis the effects of a financial crisis, we introduced the Historical scenario. This scenario reflects the trend in the financial crisis in 2009. To take account of the low market liquidity, the time horizon for this scenario was extended and covers a period of three months.

Further hypothetical scenarios are based on the potential market movements in the event of a worsening of the debt crisis in Europe (Contagion scenario) or a negative demand shock in Germany (Recession scenario). Until the end of 2016, the China Hard Landing scenario simulated the effects of a slowdown in Chinese economic growth before the end of 2017. At the beginning of 2017, the China Hard Landing scenario was replaced by the Protectionism scenario reflecting the introduction of protectionism in the USA that dampens growth in China in conjunction with a growth shock in Turkey. The Interest Rate Shock scenario is used to analyse the impact of a rapid rise in interest rates in the eurozone.

At 31 December 2017, the most significant stress test results from this package of stress test scenarios and involves a potential loss of €1.5 billion in the new Protectionism scenario. The largest loss of €1.3 billion was recorded at 31 December 2016 in the China Hard Landing scenario. The Protectionism scenario is also used in the cross-risk-type stress tests, where it is analysed for risk-taking capacity.

HVB stress test at 31 December 2017 (€ millions)



As described under the sub-header “Stress tests” in the section entitled “Implementation of overall bank management”, inverse stress tests were again performed in 2017. Risks resulting from market risk in the banking portfolio were also included in this analysis.

Another key component of the measurement of interest rate risk in the banking book is the 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 less the expected cash flows on liabilities. A relevant risk measure from this perspective is the sensitivity of the present value sensitivity per time bucket for a 1bps interest rate shock. The result is reported to the relevant committees to assess the economic impact of various changes in the yield curve.

Risk Report (Continued)

In compliance with the regulatory rules published by BaFin on 9 November 2011, 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 31 December 2017, the calculation of the present value from the managerial viewpoint taking into account the interest rate shocks gives rise to a capital requirement of 0% (31 December 2016: 1.0%). When calculated from the regulatory viewpoint, by contrast, a capital charge of 8.2% becomes apparent given an increase in interest rates of 200bps (31 December 2016: 8.2%). HVB is well below the 20% mark (in relation to the capital charge) specified, above which the banking supervisory authorities consider a bank to have increased interest rate risk. These figures include the positions of HVB, customer margins are not included.

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 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 rate changes.

Generally, the Treasury department hedges interest rate risk exposure from commercial banking transactions. The volume exposed to interest rate risk in the Treasury department is monitored through a set of limits and triggers.

HVB measures and monitors this risk within the framework of a banking book interest rate risk policy based on the corresponding Group policy that establishes consistent methodologies and models and limits or triggers to focus on, with regard to the sensitivity of net interest income and the present value.

Summary and outlook

As was already the case in 2017, efforts will again be made in 2018 to concentrate on low market risk customer business in our trading activities on the financial markets. The trading structure was streamlined to further boost its efficiency without restricting the scope of business. HVB will continue to invest in the development and implementation of electronic sales platforms.

3 Liquidity risk

Definition

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 not being able to obtain sufficient liquidity when required or that liquidity will only be available at higher interest rates, and the risk that the Bank will only be able to liquidate assets on the market at a discount. Liquidity risk comprises the following risk categories:
– short-term liquidity risk
– operational liquidity risk (part of short-term liquidity risk)
– funding risk
– market liquidity risk

Categories

Short-term liquidity risk

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

Operational liquidity risk, which is part of the short-term liquidity risk

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

Funding risk
The funding risk (structural liquidity risk) relates to the risk of the Bank not being able to fund its balance sheet in a sustainably stable, long-term manner (more than one year) or only being able to procure sufficient liquidity for funding at increased market interest rates and the future earnings of the company are impaired accordingly. Funding risk is a risk that requires observation, albeit not a significant one, and is assessed at regular intervals as part of the risk inventory.

Market liquidity risk
Market liquidity risk relates to the risk that the Bank would suffer losses due to the disposal of assets that can only be liquidated on the market at a discount. In the extreme case, HVB 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. Market liquidity risk is managed by the CRO organisation, which carries out expanded market liquidity analyses.

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

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

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

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

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

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

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

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

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

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

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

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

Alongside this internal measurement methodology, HVB is subject to the regulatory standards for short-term liquidity risk defined in the German Liquidity Regulation (Liquiditätsverordnung – LiqV).

Calculating the liquidity coverage ratio (LCR) is intended to ensure that an institution is able to meet its short-term payment obligations under the assumption of an acute stress scenario over a period of 30 calendar days. The requirement in place as at 31 December 2017 of a minimum of 80% is significantly exceeded by HVB with a figure in excess of 100%.

Funding risk

To measure funding risk, the long-term funding needs based on the expected business development are reported and updated in a co-ordinated process. The long-term funding need, which is used to set the funding targets and is presented to the ALCO, takes into account the assets and liabilities falling due in the planning period. Limiting maturity mismatches between the long-term assets and liabilities ensures a balanced funding structure in defined maturity buckets with a view to maintaining an adequate structural liquidity ratio (SLR). The key assumptions underlying the risk measurement methods are reviewed on a regular basis to assess their appropriateness.

Monitoring and controlling

Short-term liquidity risk

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

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

Funding risk

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

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

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

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

Quantification and specification

Short-term liquidity risk

Within the framework of our limit system, we showed an overall positive balance of short-term liquidity risk of €37.8 billion at HVB for the three-month maturity bucket at the end of December 2017 (31 December 2016: €32.8 billion). The holding of available securities eligible as collateral for central bank borrowings that can be employed on the next banking day to compensate for unexpected outflows of liquidity amounted to €12.8 billion at the end of 2017 (31 December 2016: €29.9 billion).

The requirements of the German Liquidity Regulation were met at all times by the affected units of HVB during the reporting period. The funds available exceeded the callable payment obligations for the following month by an average of €39.2 billion for HVB in 2017 (in 2016: €21.2 billion) and €46.2 billion at 31 December 2017 (31 December 2016: €17.2 billion). This means that we are significantly above the internally defined trigger.

Funding risk

The funding risk of HVB was again low in 2017 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 December 2017, HVB had obtained longer-term funding with a volume of €17.9 billion (31 December 2016: €11.5 billion), including €5.3 billion under the ECB's Targeted Longer-Term Refinancing Operations (TLTRO)-II programme. At the end of December 2017, 114.0% (31 December 2016: 102.7%) of assets with an economic maturity of more than one year were covered by liabilities with an economic maturity of more than one year. Consequently, we do not expect to face any significant liquidity risk in the future. With their high credit quality and liquidity, our Pfandbrief covered bonds still remain an important funding instrument.

Stress tests

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

We include Bank-specific, market-wide and combined scenarios when conducting our stress tests. The calculations at the end of 2017 showed that the available liquidity reserves were sufficient to cover the funding requirements over the minimum period demanded.

Summary and outlook

There continue to be uncertainties concerning security, monetary and economic policy worldwide, especially in connection with the ongoing geopolitical conflicts and the continuing tensions between the USA and North Korea.

Furthermore, it remains impossible to definitively assess in its entirety the impact of the UK's impending exit from the European Union as announced.

To what extent and in what intensity the financial markets will react to all of these developments cannot be predicted.

Risk Report (Continued)

HVB again put in a good performance in 2017 in this demanding market environment. Among other things, the contributory factors include our good liquidity situation, the sound financing structure and the liquidity management measures that have been taken.

In this context, we expect our liquidity situation to remain comfortable. Our forward-looking risk quantification and regular scenario analysis will remain important parameters in this regard going forward.

4 Operational risk

Definition
In accordance with the Capital Requirements Regulation (CRR), HVB defines operational risk as the risk of losses resulting from flawed internal processes or systems, human error or external events. This definition also includes legal risk but not strategic risk or reputational risk. Legal risk includes, but is not limited to, fines, penalties and damages resulting from supervisory actions, and settlements paid to private individuals.

Strategy
The risk strategy for operational risk is part of the HVB and HVB Group risk strategy, which is updated and adopted by the Management Board of HVB on an annual basis.

The risk strategy aims to reduce operational risk to a reasonable level from an economic standpoint (under cost/benefit considerations), taking into account the defined risk appetite. This approach is intended above all to reduce or prevent significant losses by applying suitable measures, which additionally helps to boost sustainable profitability.

In this context, operational risk that is potentially grave or could seriously damage the Bank must be subject to planning measures that go beyond mere profitability concerns.

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

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

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

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

Risks identified within HVB are concentrated mainly in selling risks and risks arising from settlement and process management.

Employees in Business Continuity Management, Outsourcing, Compliance and Legal perform a risk-management function in a special way in that they carry out risk-controlling and risk-monitoring tasks.

Information technology (IT)
HVB's IT services are mostly provided by UniCredit Business Integrated Solutions S.C.p.A. (UBIS). The Information and Communication Technology (ICT) management processes of HVB continue to require 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 in turn outsourced by UBIS to Value Transformation Services (V-TS, a joint venture of IBM and UBIS) as defined for the separate controls in HVB's ICS. Within the ICS, the enhancement of relevant metrics and control processes forms a key element of the activities planned for 2018. 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.

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 appropriate and 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 in place. Both also contain rules on how such 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. Comprehensive risk assessment is ensured by this approach. On account of its high degree of specialisation, tax compliance is managed within the CFO organisation exclusively by the Tax Affairs unit and is refined on an ongoing basis.

Legal risks
HVB is involved in various legal proceedings. The following is a summary of cases against HVB, 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.

Non-compliance with the large number of legal and regulatory requirements may lead to litigation and administrative proceedings or investigations and subject HVB to damage claims, regulatory fines or other penalties.

In many cases, particularly in criminal or administrative proceedings by the relevant authority and when asserting claims for an unspecific amount, there is considerable uncertainty regarding the outcome of the proceedings and the amount of possible damages. 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 respective circumstances and consistent with the accounting standards of the German Commercial Code applied at HVB and other accounting standards applied in accordance with IFRS.

VIP 4 Medienfonds Fund
Various investors in 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 an 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 proceedings pursuant to the Capital Markets Test Case Act (Kapitalanleger-Musterverfahrensgesetz), which is pending at Munich Higher Regional Court, will affect only a few cases still in dispute.

Risk Report (Continued)

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 that they were advised on the basis of an allegedly incorrect prospectus. The questions regarding correct and sufficient advice provided to a customer as well as questions regarding the limitation period and thus the prospects of success in proceedings depend on the individual circumstances of the particular case and are therefore usually 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.

Legal proceedings are pending pursuant to the Capital Markets Test Case Act before Munich Higher Regional Court relating to one retail fund with thermal power plants as its investment target. The court has ordered several expert opinions to be obtained in order to assess the question of an alleged prospectus liability. As it can be expected that investors into this fund recover their invested capital mainly through fund payout, the consequences of a potentially negative decision of the Higher Regional Court are essentially limited to compensation for lost profit and interest relating to the judicial proceedings. In the meantime nearly all proceedings have come to a conclusion in settlement agreements.

Real-estate financing
A number of customers dispute their obligation to make repayments under their property loan agreements because they are of the opinion that the Bank gave insufficient advice about the intrinsic value of the acquired property and/or the expected rent. In the last few years only a few new lawsuits have been filed. In the light of the experience gained, the Bank assumes that there are no significant risks expected in this context.

Derivative transactions
The number of complaints and lawsuits filed against the Bank by customers in connection with inadequate advice provided upon the conclusion of derivative transactions is declining. The main contention in the complaints filed and in the pending proceedings is 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 of the fact that the initial market value of the derivative product might be negative. Experience gained so far show that the characteristics of the individual product and the relevant 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 play a crucial role.

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 (equities transactions around dividend dates and claims for withholding tax credits on German share dividends). 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 submitted a claim for compensation against individual former members of the Management Board, not seeing reasons to take any action against the current members. These proceedings are still pending.

In addition, preliminary proceedings have been instigated against current or former employees of HVB by the public prosecutors in Frankfurt/Main, Cologne and Munich with the aim of investigating alleged tax evasion offences on their part. HVB cooperated – and continues to cooperate – with the aforementioned public prosecutors who investigated offences that include possible 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 concluded in November 2015 with, among other things, the payment by HVB of a fine of €9.8 million. The investigations by Frankfurt on the Main public prosecutor against HVB under Section 30 of the Administrative Offences Act (Ordnungswidrigkeitengesetz) were concluded in February 2016 by the payment of a fine of €5 million. The investigations by Munich pubic prosecutor against HVB also were concluded in April 2017 following the payment of a forfeiture of €5 million. At present, all criminal proceedings against HVB have been terminated.

The Munich tax authorities are currently performing a regular field audit of HVB for the years from 2009 to 2012 which includes, among other things, a review of other transactions in equities around the dividend record date. During these years the Bank performed, among other things, securities-lending transactions with different domestic counterparties which include share transactions around the dividend record date. It remains to be clarified whether, and under what circumstances, tax credits can be obtained or taxes refunded with regard to the transactions carried out around the dividend record date, and what the consequences for the Bank will be if the assumed tax treatment is not allowed. The same applies for the years from 2013 until 2015 following the regular tax audit currently being performed. It cannot be ruled out that HVB might be exposed to tax claims in this respect by the relevant tax offices or third party claims under civil law. HVB is in constant communication with relevant regulatory authorities and competent tax authorities regarding these matters. HVB has set up a reasonable level of provisions.

Lawsuit for consequential damages

A customer filed an action against HVB with Frankfurt Regional Court for consequential damages of €195 million for the following reasons: In 2010, HVB was ordered by Frankfurt Higher Regional Court to pay damages to the plaintiff in the amount of €4.8 million due to the faulty handling of a bill of exchange and in addition to compensate further damage suffered by the plaintiff as a result of this case of damage. In 2011, the plaintiff filed an action against HVB before Frankfurt Regional Court for alleged consequential damages in the amount of €33.7 million based on lost profit. The plaintiff then extended the claim to the amount of €51.54 million and most recently to €195 million. In its 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. In the meantime the plaintiff has appealed against the court ruling to Frankfurt Higher Regional Court.

Proceedings in connection with financial sanctions

In the past, violations of US sanctions have resulted in certain financial institutions entering into settlements and paying substantial fines and penalties to various US authorities, including the US Treasury Department's Office of Foreign Assets Control (OFAC), the US Department of Justice (DOJ), the New York State District Attorney (NYDA), the US Federal Reserve (Fed) and the New York Department of Financial Services (DFS) depending on the individual circumstances of each case.

In March 2011, HVB received a subpoena from the NYDA relating to historic transactions involving certain Iranian entities, designated by OFAC, and parties related to them. In June 2012, the DOJ opened an investigation of OFAC-related compliance by HVB and its subsidiaries in general. In this context, HVB is conducting a voluntary investigation of its US dollar payments practices and its historical compliance with applicable US financial sanctions, in the course of which certain non-transparent practices have been identified. HVB Group is cooperating with various US authorities and is updating other relevant non-US authorities as appropriate. Although we cannot at this time determine the form, extent, scope or timing of any resolution with any relevant authorities, the costs of the internal investigation, remediation required and/or payment or other legal liability incurred can lead to liquidity outflows and could potentially have a material adverse effect on the net assets and operating results of HVB.

Measurement

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.

Risk Report (Continued)

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 economic capital for operational risk is determined as a whole for HVB Group using the internal AMA model and then allocated to HVB and its AMA subsidiaries using a risk-sensitive allocation mechanism.

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

Stress tests

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

Summary and outlook

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

5 Other risks

HVB 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 that are described exclusively in qualitative terms. The risk arising from outsourcing activities is not treated as a separate risk type at HVB, but is considered a cross-risk type and is consequently listed under other risks.

Real estate risk

Real estate risk covers potential losses resulting from fluctuations in the fair value of the real estate portfolio of HVB. No land or properties are included that are held as collateral in lending transactions.

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 2017, 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 (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 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.

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.

Real estate risk is managed overall on the basis of an internal capital limit for HVB. In addition, economic capital limits adjusted for diversification effects were allocated to the business segments at HVB Group level for 2017 in the context of overall bank management. Based on these limits, HVB has defined early warning indicators in the form of targets and triggers in order to identify in advance any overshooting. The limits are checked for adequacy mid-year and, if necessary, adjusted.

The Bank uses a variance-covariance model with a confidence level of 99.90% and a holding period of one year to quantify real estate risk. The Bank's proprietary real estate indices are employed as explanatory risk factors for the parametrisation of the model. These indices are broken down by property type (rented office areas, rented flats, owner-occupied homes (houses or flats), land for housing construction, agricultural properties, retailers with small floor areas, retailers with large floor areas, land for commercial construction, warehouse/logistics properties) and geographical location. In the case of foreign real estate, there is currently only one index that is derived from the present portfolio in terms of its composition due to the current strategic orientation of the portfolio. For German properties, time series are currently available for the most important municipalities.

The Credit Risk Control unit determines the economic capital for real estate risk and reports this to the business segments, the CRO, the Management Board and the Risk Committee of the Supervisory Board. In line with the risk strategy, quarterly risk reporting also includes a comparison of the actual values with the limits.

The economic capital for the real estate risk at HVB, without taking account of diversification effects between the risk types, amounts to €52 million at 31 December 2017, which decreased by €15 million (31 December 2016: €67 million). The fully diversified economic capital for the real estate risk at HVB stands at €29 million (31 December 2016: €42 million).

The risk figures relate to a portfolio valued at €280 million.

Breakdown of the real estate portfolio by type

	PORTFOLIO VALUE € millions		SHARE in %	
	2017	2016	2017	2016
Strategic real estate	253	239	90.2	63.1
Non-strategic real estate	27	140	9.8	36.9
HVB	**280**	**379**	**100.0**	**100.0**

From a geographical perspective, the focus is on the Hamburg region with 44.8% 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 deliver information on the estimated, scenario-related lower fair values for real estate that would ensue compared with the base scenario, should the scenario materialise.

For 2018, there are also plans to make further disposals from the portfolio of non-strategic real estate. The situation on the real estate markets will depend on economic developments once again in 2018. There is ongoing great demand from investors for properties in prime locations.

A group-wide model for quantifying the real estate risk is planned to replace the local model in the course of 2018.

Business risk

We define business risk 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 a 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.

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 has specified corresponding initiatives intended to counter the earnings risks.

Risk Report (Continued)

In the CIB business segment, the strategic focus in 2017 remained on growth in virtually all areas and product factories. Support for this objective came from our SQUARED growth strategy, which was implemented in 2015 and has been refined and enhanced by Transform 2019. The original three pillars were combined into four strategic components:
– Confirm and improve market leadership
– Exploit synergies
– Ongoing cost discipline and simplification
– Constant risk culture awareness

We have designated the more detailed and expanded plan as "One Bank, One UniCredit" – Transform 2019, initially published in December 2016. By enhancing our strategy, we intended to further expand the central role of HVB and UniCredit with core CIB customers, exploit opportunities with Mittelstand customers (new joint venture between CIB and Unternehmer Bank – UBK) for Mergers & Acquisitions (Equity Capital Markets UBK, Debt Capital Markets UBK, Corporate Treasury Sales, Corporate Finance Advisory) and become Europe's powerhouse for trade finance. We intended to increase our international footprint by selling our international services to customers in our core countries, strategically expanding our presence in countries given special priority and standardising and refining our operating platform. At the same time, we expanded our presence along the developments of trade flows with a view to winning as customers the best international actors outside of our home markets. We intended to become the "go-to" bank for business customers by expanding the cross-selling opportunities as well as the underwriting and distribution capacities. We also strove to heighten the service commitment for banks.

The goal of the Commercial Banking business segment in 2017 was to further expand its market position, despite the challenging market environment. Among other things, strategic initiatives intended to counter earnings risks focused on risk-adjusted pricing, the central control of major transactions by higher-level bodies, reinforced value creation with the customer in order to generate earnings, greater customer orientation by enhancing quality in the core business and sustainable cost management achieved through high cost awareness and continuous cost controlling.

Business risk is managed overall on the basis of an internal capital limit for HVB. Based on this limit, HVB has additionally defined early warning indicators in the form of targets and triggers in order to identify in advance any overshooting. The limits are checked for adequacy mid-year and, if necessary, adjusted.

Since the end of 2016, HVB has been using 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 business risk is determined by Credit Risk Control and reported to the business segments, the CRO, the Management Board and the Risk Committee of the Supervisory Board. In the context of the risk strategy, the quarterly risk reporting includes in addition a comparison of the actual figures with the limits.

The economic capital for HVB's business risk, without taking account of diversification effects between the risk types, fell by €14 million to €428 million in 2017 (31 December 2016: €442 million). The fully diversified economic capital for HVB's business risk totals €312 million as at 31 December 2017 (31 December 2016: €318 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. This is used as the basis for determining the change in the VaR.

Pension risk

HVB has undertaken to provide a range of different pension plans to current and former employees, which are largely financed by various forms of investment, some of which are external. Pension risk may arise in connection with the pension plans on both the assets side and the liabilities side (pension commitments). This may be caused by a decline in the fair value of plan assets on the assets side due to disadvantageous changes in market prices as well as by an increase in the obligations on the liabilities side, for instance due to a reduction in the discount rate. Furthermore, actuarial risks such as longevity risk (changes to the mortality tables) may arise 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.

The risks are calculated and monitored at regular intervals as part of our risk management 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 €917 million was determined as at 31 December 2017 for the total pension risk of HVB (31 December 2016: €810 million). The slightly higher interest level in comparison to the previous year for longer terms leads to potentially greater decreases in interest being considered in the calculation of risk resulting in a higher risk value as a consequence. 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.

Low interest rates continue to be seen as the main negative factor for both the amount of the pension commitments disclosed and the amount of the income that can be generated from the plan assets with acceptable risk. In the current low interest rate environment, it is perfectly conceivable that the discount rate will return to its all-time lows seen in 2016 (as at 30 June 2017 and at year-end 2017, the discount rate stood at 2.15% in each case), thus causing the pension obligations to rise. 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

Financial investment risk covers potential losses arising from fluctuations in the measurement of HVB's equity interest. HVB's financial investment risk stems from the equity held in companies that are not consolidated in HVB and are not included in market risk, and the risk from small legal entities.

The financial investment portfolio mainly consists of listed and unlisted interests, private equity investments (co-investments and direct investments), equity derivatives and other fund shares (special cases, real estate 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 financial investment risk is controlled at a higher level on the basis of a limit for internal capital for HVB. In addition, the business segments at HVB Group level have been allocated limits for economic capital for the year 2017 that were adjusted for diversification effects in the sense of overall bank management. On the basis of these limits, HVB has additionally defined early warning indicators in the form of target values and triggers in order to indicate in advance any overshooting. The limits are reviewed for adequacy mid-year and adjusted as necessary.

The risk from holdings in unlisted companies is covered by applying a cautious approach of 100% capital backing of the investment value that has been in place since June 2017 following modification of the model. In addition, risks from hedge funds, private equity funds (including issuer risks from the trading book) and FX risks from the investment portfolio are no longer included in financial investment risk but are included in the calculation of the market risk.

Risk Report (Continued)

Credit Risk Control calculates the economic capital for financial investment risk, and reports it to the business segments, the CRO, the Management Board and the Risk Committee of the Supervisory Board. In line with the risk strategy, quarterly risk reporting also includes a comparison of the actual values with the limits.

The economic capital for financial investment risk at HVB, without taking into account any diversification effects between the risk types, increased by €49 million and stands at €1,197 million as at 31 December 2017 (31 December 2016: €1,148 million). The share of the risk for small legal entities amounts to 0.03%. Applying the new model retroactively to the previous reporting date, the economic capital for the financial investment risk amounts to €1,209 million as at 31 December 2016. Eliminating the modification to the model used gives rise to a slight decrease in the economic capital of €12 million in comparison to 31 December 2016. HVB's fully diversified economic capital amounts to €1,197 million as at 31 December 2017 (31 December 2016: €1,033 million).

Breakdown of the financial investment portfolio

	PORTFOLIO VALUE € millions		SHARE in %	
	2017	2016	2017	2016
Private equity funds	—	111	—	8.5
Other holdings[1]	1,197	1,191	100.0	91.5
HVB	**1,197**	**1,302**	**100.0**	**100.0**

1 listed and unlisted investments

The impact on financial investment risk is analysed as part of the cross-risk-type stress tests. Irrespective of the macroeconomic scenarios, a 100% capital charge is assumed for the stressed economic capital.

As was the case in 2017, HVB will continue to selectively dispose of non-strategic shareholdings in 2018. It will also set up new companies and look into 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.

Strategic 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.

Strategic risk is measured using qualitative methods and not included in the calculation of the risk-taking capacity. For this purpose, we continually monitor the national and international environment in which HVB operates (e. g. political, economic, regulatory or bank-specific market conditions) and review our own strategic positioning.

Strategic risk is monitored on an ongoing basis by the Management Board and its staff offices and, if necessary, analysed in depth on an ad hoc basis. At the same time, the Management Board discusses any changes to the strategic parameters, whereby alternative courses of action are derived and implemented accordingly. This is done during the Management Board meetings as well as the Management Board conclaves that are held at least once a year. A dialogue with external experts (such as management consultants and independent auditors) regarding strategic issues and options at Management Board level and below ensures the involvement of external experts' know-how.

Risk arising from the overall economic environment
Based on HVB's focus with its Commercial Banking and CIB business segments and a wide variety of products and its concentration on its home market of Germany and further core countries, the overall economic developments in Germany and within the eurozone as well as developments on the international financial and capital markets are of great importance for the assets, financial position and operating result of HVB. As a consequence, the regular economic analysis carried out by HVB covers macroeconomic developments in the eurozone, the monetary policy of central banks and the discussions surrounding the deleveraging of highly indebted countries.

As a sound universal bank with excellent customer relationships, HVB considers itself fundamentally in good shape to continue operating successfully in this challenging environment. Should, however, the measures taken to stabilise the eurozone fail to have the desired effect, for instance, or economic growth slow in Europe, or further turmoil roil the financial and capital markets, this could have a negative effect on the assets, financial position, and operating result of HVB.

Risks arising from the strategic orientation of HVB's business model
HVB as a universal bank focuses on the regional management of the German market and also acts as the centre of competence for the investment banking activities of UniCredit as a whole. As a consequence, the bank's business model is built upon several pillars. However, depending on developments on external markets, it cannot always be ruled out that imbalances in earnings contributions could arise. Thus, the business segments are impacted by the persistent low interest rate environment each in their own way.

The modernisation of the retail banking activities coupled with the related transition to a multi-channel bank with comprehensive service, information and advisory offerings is intended to enable HVB to maintain a sustainable profitability of the retail banking business. The main strategic objectives are to implement a clearly differentiated service model aimed at upgrading the quality of the advice and service we give customers and to focus clearly on customers holding their main bank account with HVB.

The branch will continue to represent the core element of our multichannel offer, featuring a standard, modernised and upscale appearance. However, it will act more as a point of contact for top-notch advice. It is possible that this strategic adjustment will result in the loss of a few customers, which may have a negative effect on the assets, financial position, and operating result of HVB.

The strategic orientation of the CIB business segment is to generate additional value for clients by offering specific advisory models and a wide variety of products geared to the clients' specific needs. Even though investment banking activities are client-driven, revenues are traditionally volatile as customer demand for CIB products is influenced by the market environment. Whilst in a normal market environment investment banking is very profitable, there are increased risks to the assets, financial position, and operating result under difficult market conditions.

Risks arising from the consolidation of the banking market
Consolidation on the German and international banking and financial markets has been ongoing for many years. Further shifts in market shares might occur that could potentially also negatively impact the assets, liabilities, financial position, and profit or loss of HVB.

Risks arising from changing competitive conditions in the German financial sector
The German financial services market, which is HVB's core market, is subject to tough competition due in part to its three-pillar structure (public-sector savings banks and Landesbanks, cooperative banks and private banks). Despite some mergers and takeovers, there are still overcapacities on the German market, especially in the retail banking sector. In addition, more and more European and international players as well as Fintech enterprises operating in the retail and corporate banking segment are seeking to enter the German market. The result is intense competition for customers and market share, in which HVB is facing fierce trade rivalry.

It cannot be excluded that a further intensification of competitive conditions in the financial sector could have a negative effect on the assets, financial position, and operating result of HVB.

Risks arising from changes to the regulatory and statutory environment
The activities of HVB are regulated and supervised by the central banks and regulatory authorities in the countries and regions where HVB does business. HVB comes under the supervision of the ECB as part of the Single Supervisory Mechanism (SSM).

Risk Report (Continued)

The regulatory requirements in the individual countries/regions are subject to changes and may vary. This might impact the competitive situation and necessitate further measures on the part of HVB. Besides a higher cost of capital and additional expenses arising from the implementation of regulatory requirements, adjustments to the business model may become necessary.

The failure of HVB or one of its subsidiaries to fully satisfy the regulatory requirements of the supervisory authorities could lead to the responsible authority imposing sanctions. In the worst case, the business activities of HVB or its subsidiaries could be discontinued.

All in all, this could give rise to a negative impact on the assets, financial position, and operating result of HVB.

Risks arising from a change in HVB's rating

HVB has an investment grade rating from the external rating agencies Standard & Poor's (S&P), Moody's and Fitch. The implementation of new regulations (specifically the Bank Recovery and Resolution Directive (BRRD)) has led to numerous adjustments to the rating methods on the part of the rating agencies in recent years. In this context, the rating agencies have aligned the ratings of the individual financing instruments to the anticipated liability cascade. As a consequence, rating adjustments were also performed at HVB.

A rating downgrade could make funding costs higher for HVB or have a negative impact on the business opportunities of HVB as a counterparty in the interbank market or with rating-sensitive customers. The possibility cannot be excluded that the risk-reward profile of business activities affected will alter so significantly that modifications are made to business segments with potentially negative consequences for the assets, financial position, and operating result of HVB. The possible negative effects arising from this risk will depend notably on whether HVB's rating changes less than, the same as or more than that of its competitors.

Reputational risk

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 other primary risks.

HVB applies a holistic approach to reputational risk management. This means that all significant new activities and transactions at the Bank are normally analysed with regard to potential reputational risk ("change-the-bank" approach) and individual units at the Bank are examined at regular intervals regarding latent reputational risk at the same time ("run-the-bank" approach).

Commercial transactions and new activities such as new product processes, outsourcing, projects and particular investments (such as SPVs) are included in the "change-the-bank" approach, as well as any other new activity as is appropriate. The employees responsible in each case are required to analyse the transactions/activities to identify any potential reputational risk, taking into account the existing guidelines. Once a potential reputational risk has been identified, the appropriate specialist departments are called in who will assess the reputational risk identified in terms of quality. The Reputational Risk Council (RRC) will obtain a decision on the basis of the risk analysis and the qualitative assessment.

Under the "run-the-bank" approach, the individual units of the Bank are examined at regular intervals with regard to existing and/or latent reputational risk. The process starts with what are known as risk self-assessments by important function owners (risk managers) together with the operational risk managers. A list of questions is used to carry out the risk self-assessments. Senior management is subsequently interviewed about reputational risk. The senior managers have the opportunity to review the reputational risk identified in their unit during the interview and add further material reputational risks. Where it is possible and makes sense to do so, counter-measures are defined for the individual risks.

The Bank has decided not to directly quantify reputational risk under the “run-the-bank” process on account of the fundamental difficulty of accurately assessing the possible effects of reactions from stakeholders. Instead, the risk is classified in accordance with a three-tier system (traffic light logic) as part of the “run-the-bank” approach. This involves determining the aggregate risk across two dimensions: impact on the income statement and probability of occurrence. Any reputational risk identified is documented in the Bank’s own IT system (as necessary during the year).

The individual business segments and central units are responsible for reputational risk management. Overall responsibility for monitoring rests with the OpRisk Control unit (CRO organisation). OpRisk Control consolidates the results of the senior management interviews and prepares a RepRisk Report covering the largest reputational risks at HVB.

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. 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 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 the 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’s risk management in the processes defined for the risk types concerned. The operational risk managers help the project manager and the heads of the RTOs to prepare and/or update the related risk analyses.

No further material new outsourcing arrangements were set up by HVB in 2017. An instance of outsourcing to UniCredit S.p.A. relating to the professional management of a system for credit risk evaluation (address risk analysis management system, ARAMIS), that had previously been classified as material, was downgraded to non-material following re-evaluation. This did not result in any material change to the risk involved. In the context of the introduction of the Markets in Financial Instruments Directive (MiFID II), two material outsourcing arrangements relating to reporting pursuant to Section 34h of the Securities Trading Act (Wertpapierhandelsgesetz – WpHG, ensuring post-trading transparency) in place with Deutsche Börse AG and Borsa Italiana S.p.A. were terminated and a new outsourcing arrangement relating to reporting services set up with Deutsche Börse AG as part of an approved publication arrangement (APA) and an approved reporting mechanism (ARM), effective as of 3 January 2018. This does not give rise to any material change to the risk.

Otherwise, there were no changes in the material instances of outsourcing in HVB.

ICS – Internal Control System

Internal control system with regard to the financial reporting process

Definitions and objectives

Section 289 (4) of the German Commercial Code (Handelsgesetzbuch – HGB) requires capital-market-oriented companies as defined in Section 264d HGB to describe the main features of the internal control system (ICS) and risk management system with regard to the financial reporting process.

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

Risks with regard to the financial reporting process might, for example, involve human processing errors, system weaknesses or fraudulent conduct resulting in significant financial misrepresentations or delays in financial reporting, and these might not reflect the actual situation or not give an appropriate view of the assets, liabilities and financial position. These risks might possibly entail legal penalties and, in addition, the erosion of investors' confidence and damage to the Bank's reputation. The purpose of the ICS in relation to the financial reporting process is to implement controls that ensure with an adequate degree of certainty that the annual financial statements together with the Management Report are prepared in compliance with regulations despite the identified risks.

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

The method used for the design of the ICS and thus the introduction and risk assessment of processes is based on the international "Internal Control – Integrated Framework" standard issued by the Treadway Commission's Committee of Sponsoring Organizations (COSO) and creates a solid methodological framework. The main task in this context is to define specific objectives to facilitate a control system and to monitor the effectiveness of the control system on this basis. The following objectives are pursued:

- Completeness: All transactions have been recorded and all assets and liabilities, provisions and shareholders' equity are included in the financial statements.
- Measurement: The assets and liabilities, provisions and transactions are disclosed at their correct amounts in the financial reports.
- Presentation and disclosure: The financial reports are correctly classified and discussed with regard to recognition, structure and disclosures in the notes to the consolidated financial statements, comply with the legal requirements and are published on schedule.

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

ICS organisation

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

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

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

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

Organisational structure and tasks of the CFO organisation

For purposes of the financial reporting processes, the Chief Financial Officer (CFO) organisation is essentially broken down into the following areas, from which the responsible Management Board member can draw on staff with the required skills and experience. Sets of values such as the Integrity Charter, the Code of Conduct and compliance rules have been implemented in all UniCredit countries for many years, and hence also in HVB. These values form the basis for responsible action on the part of all employees, including those involved in the financial reporting process.

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

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

Regional Planning & Controlling (CCP) is tasked with central business management, cost controlling and equity capital management at HVB. Furthermore, CCP prepares and validates the segment report in accordance with IFRS. This department also has process responsibility for the preparation of income budgets and income projections. Moreover, the business segment-related controlling departments for all the segments excluding CIB are assigned to CCP. Controlling for CIB is the responsibility of CPA. This department also carries out the reconciliation of trading income jointly with Accounting.

ICS – Internal Control System (Continued)

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

Controls in the ICS for risk minimisation
To minimise the risk of misrepresentation in financial reporting as described above, we carry out various preventive and investigative controls which are integrated in operating processes. This includes permanent controls to ensure compliance with instructions, functional separation and compliance with approval authority regulations. The controls comprise both automated system-based controls within the IT systems and manual controls.

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

Based on the requirements under Law 262 and the legal requirements under the German Commercial Code, a number of financial reporting processes complete with the risks and controls included therein were already documented in the course of implementing the ICS at HVB. The corresponding process descriptions include detailed presentations of both the individual process steps and the organisational units involved in the processes. At the same time, risk and control are defined, together with their assessment, and documented.

The focus of risk and monitoring analysis is on identifying and evaluating the risks relevant to financial reporting. Identified risk potential is sufficiently reduced through defined control steps. Periodic random sampling serves to document the implementation of these controls and provide adequate records. If the controls do not sufficiently reduce risk, or no controls are in place, appropriate measures are initiated to eliminate the identified deficiencies. The timely implementation of these measures is reviewed on a quarterly basis.

In a half-yearly certification process, the Management Board confirms to the departments in charge of processes that reporting to the CFO of HVB, and from the CFO to UniCredit, is correct.

The controls cover the aspects of the ICS described below:

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

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

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

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

A cross-departmental new product process is in place for developing and launching new products, as recorded in the Operating Guidelines. All the products relevant for a new product process are addressed in this process. Under the new product process, all concerned departments are involved to the extent that they have veto rights at the least and are authorised to enforce amendments up to and including the termination of the new product process.

ICS – Internal Control System (Continued)

The figures presented in the balance sheet and income statement are validated using deviation analysis at historical comparative figures and budget figures and on the basis of non-recurring effects in an ongoing process that is carried out over the entire course of the year under review as part of the process of preparing the monthly and quarterly financial statements.

With regard to the presentation and disclosure of financial-reporting-related data in financial reports, controls have been implemented to ensure compliance with disclosure duties particularly by such data conforming to checklists and being reviewed and approved particularly by management personnel within the CFO organisation.

UBIS carries out the back-up and archiving of data from financial-reporting-related application systems under the responsibility of the CFO in accordance with Section 257 HGB in conjunction with Sections 238 and 239 HGB and the German Generally Accepted Accounting Principles (GAAP) under the supervision of the Retained Organisation and the respective banking expert responsible. Furthermore, controls between the upstream systems (e. g. EuroSIG) and the general ledger, namely first-level controls, have been outsourced to UBIS via additional service level agreements (SLAs). Another technical review takes place in the Accounting department within the framework of second level controls.

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

To ensure the greatest possible efficiency in the process of preparing the annual financial statements, detailed timetables are drawn up on a regular basis showing precise dates for the individual process steps. These timetables serve to ensure and monitor the timely completion of financial reporting tasks and to identify the dependencies between the individual process steps and the units involved.

Furthermore, appropriate contingency plans are in place to ensure the availability of human and technical resources to handle processes regarding financial reporting. These contingency plans are constantly updated and refined.

Monitoring the effectiveness of the ICS

Internal Audit

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

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

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

The Bank's Internal Audit department must audit and assess the following areas in particular:
– functionality, effectiveness, economic efficiency and appropriateness of the internal control system
– applications, functionality, effectiveness and appropriateness of the risk management and risk control systems, reporting, information systems, and finance and accounting
– compliance with legal and regulatory standards as well as other regulations
– observation of internal operational guidelines, ordinances and regulations
– correctness of operational and business processes
– regulations and measures to protect assets

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

The head of the Internal Audit department presents a report prepared by the Management Board and Internal Audit on a quarterly basis at meetings of the Audit Committee of the Supervisory Board to report on the main findings of the audits carried out by Internal Audit and other significant aspects of its work.

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

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

In the course of the regular update of the ICS, moreover, new processes are subject to half-yearly reviews in terms of organisational changes or changes in content by the persons responsible for the process. If necessary, the documentation is modified and a new risk assessment performed. In addition, the completeness of the process documentation is checked on an ongoing basis and, if necessary, further relevant processes added and assessed, and integrated into routine ICS operations.

Income Statement of UniCredit Bank AG

For the year ended 31 December 2017

EXPENSES

(€ millions)

			2017	2016
1 Interest payable			1,160	1,658
including: netted positive interest from borrowings				
€230 million				(153)
2 Fees and commissions payable			255	338
3 Net expense from the held-for-trading portfolio			—	—
4 General administrative expenses				
a) payroll costs				
aa) wages and salaries	1,209			1,656
ab) social security costs and expenses for				
pensions and other employee benefits	335			392
		1,544		2,048
including: for pensions				
€154 million				(204)
b) other administrative expenses		1,574		1,836
			3,118	3,884
5 Amortisation, depreciation and impairment losses				
on intangible and tangible assets			27	30
6 Other operating expenses			92	305
7 Write-downs and impairments for receivables and				
certain securities as well as additions to provisions				
for losses on guarantees and indemnities			244	480
8 Write-downs and impairments on participating				
interests, shares in affiliated companies				
and investment securities			—	—
9 Expenses from absorbed losses			2	13
10 Extraordinary expenses			130	69
11 Taxes on income			158	130
12 Other taxes, unless shown under				
“Other operating expenses”			2	34
13 Net income			1,300	5
Total expenses			**6,488**	**6,946**

INCOME

(€ millions)

			2017	2016
1	Interest income from			
	a) loans and money market operations	2,981		3,559
	including: netted negative interest from borrowings			
	€127 million			(99)
	b) fixed-income securities and government-inscribed debt	420		473
			3,401	4,032
2	Current income from			
	a) equity securities and other variable-yield securities	278		339
	b) participating interests	3		45
	c) shares in affiliated companies	221		25
			502	409
3	Income earned under profit-pooling			
	and profit-and-loss transfer agreements		64	61
4	Fees and commissions receivable		1,449	1,473
5	Net income from the held-for-trading portfolio		652	572
	including: transfer as per Section 340e HGB			
	€— million			(16)
6	Write-ups on bad and doubtful debts and on certain			
	securities as well as release of provisions for losses on			
	guarantees and indemnities		—	—
7	Write-ups on participating interests,			
	shares in affiliated companies and investment securities		116	117
8	Other operating income		304	282
9	Net loss		—	—
	Total income		6,488	6,946
1	Net income		1,300	5
2	Withdrawal from retained earnings			
	a) from the reserve for shares in a controlling			
	or majority interest-holding company	—		84
	b) from other retained earnings	2		3,000
			2	3,084
3	Transfer to retained earnings			
	a) to the reserve for shares in a controlling			
	or majority interest-holding company	2		—
	b) to other retained earnings	—		84
			2	84
4	Profit available for distribution		1,300	3,005

Balance Sheet of UniCredit Bank AG

at 31 December 2017

ASSETS

(€ millions)

			31/12/2017	31/12/2016
1	**Cash and cash balances**			
	a) cash on hand	6,024		4,518
	b) balances with central banks	2,967		2,445
	including: with Deutsche Bundesbank			
	€700 million			(745)
			8,991	6,963
2	**Treasury bills and other bills eligible**			
	for refinancing with central banks			
	a) Treasury bills and zero-interest treasury notes and			
	similar securities issued by public authorities	4		—
	including: eligible for refinancing with			
	Deutsche Bundesbank			
	€— million			(—)
	b) bills of exchange	—		—
			4	—
3	**Loans and receivables with banks**			
	a) repayable on demand	30,292		6,461
	b) other loans and receivables	27,696		29,410
			57,988	35,871
	including: mortgage loans			
	€— million			(—)
	municipal loans			
	€31 million			(50)
	against pledged securities			
	€— million			(—)
4	**Loans and receivables with customers**		93,202	94,489
	including: mortgage loans			
	€41,383 million			(40.165)
	municipal loans			
	€7,500 million			(9.618)
	against pledged securities			
	€309 million			(349)
	Amount carried forward:		160,185	137,323

LIABILITIES

(€ millions)

			31/12/2017	31/12/2016
1 Deposits from banks				
a) repayable on demand		6,843		7,591
b) with agreed maturity dates or periods of notice		53,406		43,474
			60,249	51,065
including: registered mortgage bonds in issue				
€435 million				(478)
registered public-sector bonds in issue				
€229 million				(189)
bonds given to lender as				
collateral for funds borrowed:				
registered mortgage bonds				
€— million				(—)
and registered public-sector bonds				
€— million				(—)
2 Deposits from customers				
a) savings deposits				
aa) with agreed period of notice of three months	13,846			13,724
ab) with agreed period of notice				
of more than three months	59			56
		13,905		13,780
b) registered mortgage bonds in issue		4,586		5,021
c) registered public-sector bonds in issue		2,470		2,338
d) other debts				
da) repayable on demand	73,131			71,180
db) with agreed maturity dates or periods of notice	37,014			31,830
including: bonds given to lender as				
collateral for funds borrowed:				
registered mortgage bonds				
€1 million				(3)
and registered public-sector bonds				
€— million				(—)
		110,145		103,010
			131,106	124,149
Amount carried forward:			191,355	175,214

ASSETS

(€ millions)

			31/12/2017	31/12/2016
Amount brought forward:			160,185	137,323
5 Bonds and other				
fixed-income securities				
a) money market paper				
aa) issued by public authorities	154			4
including: those eligible for collateral for				
Deutsche Bundesbank advances				
€151 million				(—)
ab) issued by other borrowers	442			1,549
including: those eligible for collateral for				
Deutsche Bundesbank advances				
€— million				(60)
		596		1,553
b) bonds and notes				
ba) issued by public authorities	16,845			21,541
including: those eligible for collateral for				
Deutsche Bundesbank advances				
€16,499 million				(20.971)
bb) issued by other borrowers	26,187			27,840
including: those eligible for collateral for				
Deutsche Bundesbank advances				
€17,078 million				(18.765)
		43,032		49,381
c) own bonds		5,067		2,513
nominal value €5,000 million				(2.500)
			48,695	53,447
6 Equity securities and other variable-yield securities			791	801
6a Held-for-trading portfolio			49,875	54,505
7 Participating interests			89	174
including: in banks				
€15 million				(13)
in financial service institutions				
€9 million				(7)
8 Shares in affiliated companies			2,389	2,484
including: in banks				
€795 million				(878)
in financial service institutions				
€488 million				(488)
Amount carried forward:			262,024	248,734

LIABILITIES

(€ millions)

			31/12/2017	31/12/2016
Amount brought forward:			191,355	175,214
3 Debt securities in issue				
a) bonds				
aa) mortgage bonds	11,956			9,689
ab) public-sector bonds	1,284			1,417
ac) other bonds	3,470			2,114
		16,710		13,220
b) other debt securities in issue		3		—
including: money market paper				
€— million				(—)
acceptances and promissory notes				
€3 million				(—)
			16,713	13,220
3a) Held-for-trading portfolio			27,258	31,900
4 Trust liabilities			4	3
including: loans taken out on a trust basis				
€4 million				(3)
5 Other liabilities			6,517	6,719
6 Deferred income				
a) from issuing and lending operations		84		30
b) other		122		145
			206	175
6a) Deferred tax liabilities			—	—
7 Provisions				
a) provisions for pensions				
and similar commitments		—		—
b) tax provisions		630		662
c) other provisions		2,569		2,939
			3,199	3,601
8 Subordinated liabilities			678	500
9 Participating certificates outstanding			—	—
including: those due in less than two years				
€— million				(—)
10 Fund for general banking risks			638	638
thereof: special items as per Section 340e (4) HGB				
€347 million				(347)
Amount carried forward:			246,568	231,970

ASSETS

(€ millions)

			31/12/2017	31/12/2016
	Amount brought forward:		262,024	248,734
9	Trust assets		4	3
	including: loans granted on a trust basis			
	€4 million			(3)
10	Intangible assets			
	a) internally generated intellectual property rights			
	and similar rights and assets	—		—
	b) purchased franchises, intellectual property rights,			
	and similar rights and assets,			
	as well as licences to such rights and assets	9		13
	c) goodwill	—		—
	d) advance payments	1		3
			10	16
11	Property, plant and equipment		144	160
12	Other assets		613	771
13	Prepaid expenses			
	a) from issuing and lending operations	37		32
	b) other	101		84
			138	116
14	Deferred tax assets		—	—
15	Excess of plan assets over pension liabilities		288	528
	Total assets		263,221	250,328

LIABILITIES

(€ millions)

			31/12/2017	31/12/2016
Amount brought forward:			246,568	231,970
11 Shareholders' equity				
a) called-up capital				
subscribed capital		2,407		2,407
divided into:				
802,383,672 shares of common				
bearer stock				
b) additional paid-in capital		9,791		9,791
c) retained earnings				
ca) legal reserve	—			—
cb) reserve for shares in a controlling				
or majority interest-holding company	10			8
cc) statutory reserve	—			—
cd) other retained earnings	3,145			3,147
		3,155		3,155
d) profit available for distribution		1,300		3,005
			16,653	18,358
Total liabilities and shareholders' equity			**263,221**	**250,328**
1 Contingent liabilities				
a) contingent liabilities on rediscounted				
bills of exchange credited to borrowers		—		—
b) liabilities under guarantees and				
indemnity agreements		36,458		36,018
c) contingent liabilities on assets pledged				
as collateral for third-party debts		—		—
			36,458	36,018
2 Other commitments				
a) commitments from the sale of assets				
subject to repurchase agreements		—		—
b) placing and underwriting commitments		—		—
c) irrevocable lending commitments		41,774		40,966
			41,774	40,966

Notes to the Annual Financial Statements

Legal basis

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

The annual financial statements of UniCredit Bank AG for the 2017 financial year are prepared in accordance with the accounting regulations in the German Commercial Code (Handelsgesetzbuch – HGB), the German Stock Corporation Act (Aktiengesetz – AktG), the German Pfandbrief Act (Pfandbriefgesetz – PfandBG) and the Regulations Governing Disclosures in the Financial Statements of Banks and Similar Financial Institutions (Verordnung über die Rechnungslegung der Kreditinstitute und Finanzdienstleistungsinstitute – RechKredV).

HVB is active in all of the sectors served by commercial and mortgage banks.

Accounting, valuation and disclosure

The amounts shown in the tables and text below are figures at the reporting date of December 31 in the case of disclosures of balances and developments from 1 January to 31 December of the year in question in the case of disclosures regarding the income statement.

1 Consistency

The same accounting and valuation methods have essentially been applied as last year. Changes in accounting and valuation methods as well as disclosure modifications are indicated for the respective items.

2 Cash and cash balances

The cash and cash balances (asset item 1) are stated at nominal amounts.

3 Treasury bills and bills of exchange

Treasury bills and other bills (asset item 2) are shown at their cash value, less any discounted amounts.

4 Loans and receivables with banks and customers

Loans and receivables with banks and customers (asset items 3 and 4) are always stated at the nominal amount plus any accrued interest. Differences between acquisition cost and nominal amount (premiums/discounts) that are attributable to interest are allocated to prepaid expenses or deferred income and taken to the income statement under net interest income in the correct period over the term of the underlying items. Any necessary write-downs and provisions compliant with Section 340f HGB are deducted.

Loans and receivables are valued at the lower of cost or market as stipulated in Section 253 (4) 1 HGB. HVB creates specific loan-loss provisions and accruals to the amount of the anticipated loss for all identifiable exposure to acute counterparty default risk. The expected flow-backs discounted with the original effective interest rate were used when determining the level of write-downs compliant with Section 253 HGB. Specific loan-loss provisions are reversed once the receivable is classified as irrecoverable and written off. Accruals are reversed as soon as the default risk has ceased.

Country risk is covered by specific loan-loss provisions for loans at risk of default; a distinction is no longer made between the default risk of the borrower and the transfer risk from the borrower to the Bank.

Latent lending risks are covered by global provisions. When assessing domestic latent lending risks, HVB applies the principles of the German tax regulations allowing financial institutions to deduct global provisions. When assessing foreign latent lending risks, HVB similarly applies the principles of the German tax regulations allowing financial institutions to deduct global provisions. The only exception is the calculation of latent lending risks for the Athens branch, where the global provisions are set up on the basis of Greek law (1% of the average volume of loans and receivables with customers).

Like other loans and receivables, mortgage loans are shown at their nominal values. Differences between the nominal amount and the actual amount paid out are included under either prepaid expenses or deferred income, and amortised over the period to which they apply.

The purpose defined at the time of acquisition (Section 247 (1) and (2) HGB) determines the assignment of loans, receivables and securities to the held-for-trading portfolios, the liquidity reserve or investment assets.

The Bank has made use of the option permitted by Section 340f (3) and has included the change in provisions compliant with Section 340f HGB to net the write-downs and impairments for receivables and certain securities as well as additions to provisions for losses on guarantees and indemnities with the write-ups on bad and doubtful debts and on certain securities as well as release of provisions for losses on guarantees and indemnities.

5 Bonds and other fixed-income securities, and equity securities and other variable-yield securities

Investment securities and securities held for liquidity purposes (securities treated neither as held for trading purposes nor as investment securities) are shown under bonds and other fixed-income securities (asset item 5) and equity securities and other variable-yield securities (asset item 6).

We measure investment securities in accordance with the modified lower of cost or market principle compliant with Section 253 (3) 5 HGB, under which impairments are only to be deducted from the acquisition cost if the loss of value is expected to be permanent. In the case of equity instruments, we recognise an impairment loss if the fair value at the reporting date is significantly lower than the carrying amount or if the fair value has fallen below the carrying amount for a long period of time. In the case of debt instruments, on the other hand, an impairment that is likely to be permanent occurs when the issuer of the securities defaults. In the event of a loss of value that is attributable to market prices, we assume that the impairment is only temporary, as these losses will be balanced out again by the due date at the latest. On the other hand, securities held for liquidity purposes are treated as current assets valued at the lower of cost or market (Section 253 (4) 1 HGB) and carried at their acquisition cost or market value, or fair value, whichever is the lower. Appropriate write-downs are taken to take account of the creditworthiness of the issuer and the liquidity of the financial instrument. Where the reasons for a write-down to the lower of cost or market no longer apply, the write-down is reversed compliant with Section 253 (5) HGB.

Notes to the Annual Financial Statements (Continued)

The Bank sets up portfolio valuation units documented in advance for certain interest-bearing securities, promissory notes (with a carrying amount of €31,255 million (2016: €34,115 million)) and certain interest rate derivatives hedged against interest rate risk by equivalent hedging derivatives (notably interest rate swaps). The hedge of the dynamic portfolio within the framework of the valuation unit is of unlimited duration; the hedging period of the individual hedging derivatives is always related to the residual maturity of the respective hedged items in the portfolio. The offset changes in the value of the interest-bearing securities amount to an increase of €195 million (2016: €344 million) for the portfolios whose hedged items encompass securities and promissory notes. The requirements of Section 254 HGB regarding valuation units have been met. The prospective hedging efficiency is documented using the interest rate risk sensitivity analysis based on basis point values (BPV). The changes in value arising from the hedged items and hedges induced from the hedged risk are set against each other and offset within the individual valuation units. Under the net hedge presentation method, no net valuation gain is taken to the income statement; provisions are set up to cover any net loss on the ineffective portion of the changes in the value of the hedge. Any valuation loss arising from the unhedged risk is included in the respective hedged items and hedging derivatives in accordance with the imparity principle.

The Bank makes use of the option permitted by Section 340f (3) HGB to net the write-downs and impairments for receivables and certain securities as well as additions to provisions for losses on guarantees and indemnities with the write-ups on bad and doubtful debts and on certain securities as well as release of provisions for losses on guarantees and indemnities.

6 Held-for-trading portfolio

Compliant with Section 340e (3) HGB, financial instruments held by banks for trading purposes are measured at fair value less a risk discount and recognised in the balance sheet. Any ensuing changes in value and provisions relating to trading transactions are recognised in the income statement under net income from the held-for-trading portfolio. In addition, compliant with Section 340e (4) HGB an amount is allocated to the "Fund for general banking risks" in accordance with Section 340g HGB, and shown in the balance sheet separately. HVB assigns all financial instruments (bonds, equity securities, derivatives, loans and receivables, and liabilities, including delivery obligations arising from short sales of securities) to the held-for-trading portfolio that are acquired and sold with the intention of generating a short-term gain on proprietary trading. This is done to exploit existing or anticipated differences between buying and selling prices or fluctuations in market rates, prices, values or interest rates to generate a trading gain or margin. No changes have been made compared with last year regarding the criteria for assignment to the trading portfolio (definition of the intention to trade). No financial instruments have been reclassified to or from the held-for-trading portfolio. The assets and liabilities that are held for trading are shown separately in the balance sheet (asset item 6a and liability item 3a).

We have determined the fair value of the financial instruments held for trading purposes in accordance with the valuation hierarchy specified in Section 255 (4) HGB. The fair value is normally defined as the amount at which the asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the balance sheet date. The market price is used for financial instruments for which there is an active market. Where there is no active market that can be used to determine the market price, the fair value is determined with the aid of generally recognised valuation methods (notably present value and option price models).

The fair values of securities and derivatives are assumed on the basis of either external price sources (such as stock exchanges or other price providers like Reuters) or determined using internal valuation models. For the most part, prices from external sources are used to calculate the fair value of securities. HVB's credit risk is included in the fair value of liabilities held for trading purposes. Derivatives are primarily measured on the basis of valuation models. The parameters for our internal valuation models (such as yield curves, volatilities and spreads) are taken from external sources, and checked for their validity and correctness by the Risk Control unit.

Appropriate adjustments (referred to as fair value adjustments) are made to the fair values calculated in this way in order to take account of further influences on the fair value (such as the liquidity of the financial instrument or model risks when the fair value is calculated using a valuation model). Rating-related default risk in trading-book derivatives is covered by applying suitable valuation adjustments (CVAs and DVAs). Furthermore, funding valuation adjustments (FVAs) were recognised in the income statement for the measurement at fair value of not fully secured derivatives. Apart from unsecured derivatives, this also affects derivatives for which collateral has been provided in favour of the counterparty only.

The main conditions that can influence the amount, timing and certainty of future cash flows from derivatives essentially relate to the following features of derivatives:
– Where the cash flows under derivatives are linked to current market prices or rates, the respective market price or market rate at the payment date determines the amount payable (in the case of interest rate swaps, for instance, the payment of the variable interest rate on the payment date depends on the interest rate fixed on this date, such as Euribor).
– Where the derivatives allow for cash settlement at fair value on the due date, the amount payable is calculated as the difference between the price set when the derivative was entered into and the current market price (in the case of a foreign exchange forward with cash settlement, for instance, the difference between the agreed forward price and the current price is payable).
– In the case of American options, unlike European options, the option buyer has the right to exercise the option at any time during the term of the option.
– Where it is possible to terminate a derivative prior to maturity (as is the case with all exchange-traded derivatives, for instance), the derivative may be terminated by paying the current fair value.
– The counterparty's credit rating and solvency are a further important consideration. If the counterparty becomes insolvent, it can no longer be expected that it will meet its obligations arising from the derivative.

These features may be included in the terms agreed for any type of derivative. Thus it is possible that foreign exchange, interest rate and equity options may be exercised at any time (American option) or only at maturity (European option). It is generally possible to determine the size of the derivative positions entered into from the respective nominal amounts.

In order to obtain the final figures disclosed in the balance sheet for the held-for-trading portfolios, the risk discount required by Section 340e (3) 1 HGB is deducted from the fair values of the financial instruments held for trading purposes determined in this way. Including the risk discount in net trading income reflects the risk of possible price losses up until the earliest possible date of realisation of unrealised valuation gains or losses. In accordance with the relevant regulatory rules, the risk discount is determined on the basis of the internal risk management system using an accounting value-at-risk approach (holding period of ten days; confidence level: 99%; 2-year observation period). We have deducted the risk discount determined for the entire held-for-trading portfolio from the assets held for trading purposes in the balance sheet (asset item 6a) and recognised it in the net income from the held-for-trading portfolio.

Notes to the Annual Financial Statements (Continued)

HVB employs derivative financial instruments both for trading purposes and to hedge balance sheet items. The vast majority are trading derivatives which are disclosed at their fair value in the held-for-trading portfolio items on the assets side and liabilities side of the balance sheet and taken to the income statement.

With interest rate swaps, the two opposing cash flows from interest are aggregated for each swap contract and disclosed net as interest income or interest expense. In the case of derivative portfolios purely held for trading, we disclose the netted interest payments in the net trading income.

Derivatives that are not associated with the held-for-trading portfolio continue to be treated in accordance with the principle of the non-recognition of pending transactions. Only cash flows that have started, such as option premiums and accrued upfront payments on unvalued banking book derivatives, are disclosed under other assets (asset item 12), other liabilities (liability item 5) and deferred income or prepaid expenses (asset item 13 and liability item 6). Irrespective of whether it results from the hedged item or the hedging derivative, any net loss arising from valuation units set up for the netting (compensation) of the change in value of the hedged item and hedging derivative associated with the hedged risk is to be taken to the income statement as a provision for valuation units. In accordance with German GAAP, any change in fair value arising from the unhedged risk in both the hedged item and the hedging instrument is recognised on a gross basis in compliance with individual valuation under the imparity principle.

The Bank takes out the credit derivatives not held for trading exclusively as a protection buyer. In this context, the credit derivatives serve to hedge the risk of default of other transactions entered into by the Bank. The credit derivatives not held for trading are therefore accounted for according to the principles relating to loan collateral.

The interest rate derivatives employed for asset/liability management of the general interest rate risk associated with receivables and liabilities in the banking book are measured as part of the aggregate interest position. Please refer to the Risk Report for a discussion of the management of the overall interest rate position.

The few remaining standalone derivatives outside the trading book are valued in accordance with the imparity principle. A provision for anticipated losses on pending transactions is set up for unrealised valuation losses; unrealised valuation gains are not recognised.

Derivatives held for trading purposes that were concluded under master agreements together with a credit support annex allowing for daily exchange of collateral are netted for each counterparty in the balance sheet. Such netting encompasses both the carrying amount of the derivatives and the collateral provided for each counterparty.

Extensive information about our derivative financial instruments, complete with detailed breakdowns by product and risk type, and showing the nominal amounts, fair values and the counterparty structure, is included in the note to the annual financial statements regarding derivative financial instruments.

The Risk Report contains a detailed overview of the Bank’s derivative transactions.

7 Participating interests and shares in affiliated companies

Participating interests and shares in affiliated companies (asset items 7 and 8) are shown at the lower of acquisition cost or – if there is a permanent impairment – fair value prevailing at the balance sheet date.

Where HVB holds a controlling interest, profits and losses of partnerships as well as dividends paid by limited or incorporated companies are recognised in the year in which they arise, provided the relevant legal conditions are met.

Compliant with Section 340c (2) 1 HGB, HVB nets income from write-ups on participating interests, shares in affiliated companies and investment securities with write-downs on these investments. In addition, the expense and income items which reflect the results from the disposal of financial assets are included in this netting process in accordance with the option permitted by Section 340c (2) 2 HGB.

8 Intangible assets
Goodwill and software are disclosed under intangible assets (asset item 10).

Purchased goodwill is calculated by setting the acquisition cost of a company against the value of the company's individual assets, less the liabilities at the time of acquisition. It is normally amortised over the standard useful life assumed by law. An impairment is recognised in the event of a permanent loss of value. Should the reasons for the impairment no longer apply, the lower amount recognised for derivative goodwill is retained.

Purchased intangible assets are capitalised at cost and amortised over their expected useful life of three to five years (software) or a longer contractual useful life of up to ten years (other intangible assets). Impairments are recognised where necessary. HVB has not made use of the capitalisation option for internally generated intangible assets classified as non-current.

9 Property, plant and equipment
Property, plant and equipment (asset item 11) is valued at acquisition or production cost, less – insofar as the assets are depreciable – depreciation using the straight-line method based on their expected useful life. In such cases, the useful lives are closely related to the depreciation rules specified in Section 7 of the German Income Tax Act (Einkommensteuergesetz – EStG) in conjunction with the depreciation tables for equipment. Pro rata depreciation is taken to the income statement for additions to furniture and office equipment in the year of acquisition.

Low-value assets with acquisition costs of up to €150 are fully expensed in the year of acquisition and shown as additions and disposals in the analysis of non-current assets. We set up a collective item for all items of property, plant and equipment with acquisition costs of between €150 and €1,000 (pool depreciation in accordance with Section 6 (2a) EStG), one-fifth of which we reverse in the financial year of creation and each of the following four years in the income statement.

10 Liabilities
Liabilities (liability items 1 to 3, 8 and 9) are stated at the amount repayable plus accrued interest. Differences between the amount repayable and the amount disbursed (premiums/discounts) that are attributable to interest are allocated to prepaid expenses or deferred income, and reversed under net interest income in the correct accounting period. Liabilities without current interest payments (zero-coupon bonds) are stated at their present value calculated using a constant discount rate over the relevant terms.

Notes to the Annual Financial Statements (Continued)

11 Provisions

In accordance with the principles of sound commercial judgement, we assess provisions for taxes, uncertain liabilities and anticipated losses on pending transactions (liability item 7) at the amount repayable, taking into account anticipated future price and cost increases. As a basic principle, provisions falling due in more than one year are discounted using the average market rate of the past seven financial years determined and published by Deutsche Bundesbank as appropriate for the respective maturities.

HVB offers its employees various types of company pension plans. To fund the company pension plans, HVB has covered its pension commitments largely with plan assets managed as external trustee assets with limited access. These plan assets are set against the liabilities arising from pension commitments or similar long-term commitments. If the plan assets of the pension funds, pension guarantee associations or retirement benefit corporations in question do not cover the amount of the equivalent pension commitments payable, HVB recognises a provision for pension funds and similar obligations in the amount of the shortfall. If the fair value of the plan assets exceeds the commitments, the difference is recognised as the excess of plan assets over pension liabilities.

We measure payment obligations arising from pension commitments at the amount payable calculated using the projected unit credit method on the basis of biometric probabilities. Anticipated future salary and pension increases are taken into account when measuring the pension commitment. Insofar as the amount of the pension commitments is determined exclusively by the fair value of securities, we recognise provisions for this at the fair value of these securities where it exceeds a guaranteed minimum amount. HVB has made use of the option to employ the average market rate determined and published by Deutsche Bundesbank as the discount rate for an assumed residual maturity of 15 years.

The German Act Implementing the Directive on Credit Agreements Relating to Residential Immovable Property and Amending Provisions of Commercial Law enacted in 2016 changed the specified discount rate used in discounting provisions for pension obligations from a seven-year average to a ten-year average. The difference occurring in every financial year between the valuation of the provision applying the corresponding market rate from the previous ten financial years and applying the corresponding average market rate from the previous seven financial years is subject to a ban on distribution.

(in %)

	2017	2016
Discount rate (10-annual average)	3.68	4.01
Discount rate (7-annual average)	2.80	3.24
Pension trend	1.60	1.50
Anticipated wage and salary increases	1.50	1.50
Career trend	0.50	0.50
Reduction of the probabilities based on the modified Heubeck 2005 G tables to		
Mortality		
Men	75	75
Women	90	90
Probability of disability		
Men	80	80
Women	80	80

Income and expenses arising from the compounding and discounting of provisions for pensions are included in other operating income less other operating expenses. However, the current service cost accruing during the period and the effects arising from changed assumptions regarding the wage, salary and pension trend and biometric probabilities are disclosed under payroll costs. The same principles apply for the impact on earnings arising from the change in the group of beneficiaries and the change in provisions for pension in connection with company restructuring activities. Similarly, the impact on earnings of the change in the discount rate is allocated to payroll costs.

An allocation totalling €332 million is required as the recognised provision for pensions and similar commitments has increased on account of the change in valuation due to the changeover to the German Accounting Law Modernisation Act (Bilanzrechtsmodernisierungsgesetz – BilMoG). HVB makes use of the option compliant with Section 67 (1) 1 of the Introductory Act to the German Commercial Code (Einführungsgesetz zum Handelsgesetzbuch – EGHGB) to aggregate at least one-fifteenth of the amount allocable to the provisions for pensions in every financial year up to 31 December 2024 at the latest. The outstanding amount of €130 million of the omitted transitional allocation was fully written up under extraordinary income/expenses in the 2017 financial year.

Furthermore, IDW RS BFA 3 requires the Bank to check whether it has incurred a loss on the aggregate holding of interest-bearing transactions in the banking book. The Bank applies the net present value approach to ascertain whether there are any circumstances beyond the individual valuation that had already occurred in economic terms at the reporting date that would lead to losses in the future. In this instance, it would be necessary to set up a provision for anticipated losses on pending transactions to ensure loss-free valuation in the banking book. To do this, the cash flows from the interest-bearing transactions in the banking book are discounted on the basis of the market interest rates at the reporting date and set against their carrying amounts using the net present value approach. All on- and off-balance-sheet, interest-bearing financial instruments outside of the held-for-trading portfolio are included in this process. All costs to be incurred in connection with the interest-bearing transactions such as risk costs, administration costs for handling the transactions through to their maturity, funding costs and so on are taken into account for discounting. The contractual cash flows are normally used as the basis; appropriate assumptions regarding the anticipated utilisation are only made and hence an economic maturity used as the basis for financial instruments with no fixed maturity (such as demand and savings deposits) in compliance with the internal risk management rules. The present values calculated in this way are set against the carrying amounts; derivatives concluded to hedge interest rate risk in the banking book are recognised at their fair value and generally set against a carrying amount of zero as they are not carried as general hedging derivatives individually in the banking book. A provision for anticipated losses on pending transactions needs to be set up to cover any shortfall between the present value determined in this way and the carrying amount. In this context, positive differences on interest-bearing transactions may not be offset against negative differences unless the transactions concerned are controlled together in internal interest rate risk management.

12 Plan assets

Assets serving exclusively to settle pension commitments or similar long-term commitments, and to which all other creditors do not have recourse, are measured at fair value and offset against the underlying commitment.

If the offsetting results in an excess of commitments over plan assets, we recognise a provision for pensions and similar commitments (liability item 7) to this amount. If the value of the assets exceeds the commitments, the amount is recognised under excess of plan assets over pension liabilities (asset item 15).

The plan assets consist mainly of investment fund shares that are recognised at the current redemption price (fair value).

Notes to the Annual Financial Statements (Continued)

Income and expenses arising from plan assets are shown in other operating income less other operating expenses.

Compliant with Section 8a of the German Semi-Retirement Act (Altersteilzeitgesetz – AltTZG), employee credits for semi-retirement are secured by pledging securities to the trustee.

13 Deferred tax assets and liabilities

Compliant with Section 274 HGB, deferred tax items are determined for temporary differences between the carrying amount of an asset, liability or deferred item shown in the commercial balance sheet and the corresponding amount disclosed for tax reporting purposes as well as for tax loss carryforwards and tax credits. German corporations are normally charged a corporate income tax rate of 15%, irrespective of any dividend distribution. Deferred taxes are measured using the uniform corporate income tax rate of 15.8%, including the solidarity surcharge, and the municipal trade tax dependent upon the applicable municipal trade tax multiplier. At HVB, this results in an overall valuation rate for the domestic portion of deferred taxes of 31.4%. The respective local tax rates are applied analogously for the foreign establishments. Compliant with Section 274 (1) 2 HGB, the deferred tax assets involved have not been recognised on account of an aggregate future reduction in tax. This results mainly from tax valuation provisions regarding general provisions and held-for-trading portfolios as well as tax loss carryforwards.

14 Foreign currencies

Amounts in foreign currency are translated in accordance with the principles set forth in Section 340h and Section 256a HGB. As a result, assets and liabilities denominated in foreign currency and spot transactions outstanding at the balance sheet date are always converted into euros using the mean spot rate applicable at the balance sheet date. The foreign currency positions in the portfolio not held for trading that are concluded in each currency are transferred to the held-for-trading portfolio on a daily basis under a standard system of currency risk management that is applicable across the Bank as a whole. The translation gains on the foreign currency positions managed in the held-for-trading portfolio are recognised at fair value in the income statement in accordance with the valuation methods applicable to the held-for-trading portfolio (Section 340e (3) 1 HGB). Consequently, the entire net income from FX trading is disclosed under net income from the held-for-trading portfolio in the income statement. On the other hand, investment securities denominated in foreign currency that are not specifically covered in the same currency and are not transferred to the held-for-trading portfolio as part of currency risk management applicable throughout the Bank are carried at their historical cost. Outstanding forward transactions are translated using the forward rate effective at the balance sheet date.

Notes to the Income Statement

The condensed income statement is shown with the Management Report.

15 Breakdown of income by region

The following table shows a breakdown by region of:
– interest income
– current income from equity securities and other variable-yield securities, participating interests and shares in affiliated companies
– fees and commissions receivable
– net income from the held-for-trading portfolio and
– other operating income

(€ millions)

	2017	2016
Total income	**6,308**	**6,768**
Germany	4,945	5,491
Italy	509	434
United Kingdom	502	446
Rest of Europe	52	54
Americas	247	259
Asia	53	84

16 Net interest income

The following table shows the breakdown of net interest:

(€ millions)

	2017	2016
Net interest income	**2,807**	**2,844**
Interest income from		
lending and money market transactions	2,981	3,559
fixed-income securities and government-inscribed debt	420	473
Current income from equity securities and other variable-yield securities, participating interests and shares in affiliated companies	502	409
Income from profit-pooling and profit-and-loss-transfer agreements	64	61
Interest expenses	1,160	1,658

Negative interest that the Bank is required to pay for assets (such as interest for average reserve assets exceeding the required minimum reserves and for other deposits at the ECB) is reported under interest income with a negative sign (€127 million, 2016: €99 million); where negative interest is received on the liabilities side, this is entered as interest expenses with a positive sign (€230 million, 2016: €153 million). This mainly relates to securities repurchase agreements, overnight deposits and forward transactions with banks and institutional investors.

The interest expense arising from the compounding of provisions amounts to €3 million (2016: €3 million).

Notes to the Income Statement (Continued)

17 Services performed for third parties
HVB performed significant services for third parties notably in portfolio, asset and trust-loan management, in the brokerage of insurance, savings and loan contracts and investment funds, in investment and securities commission activities, and in the handling of payments.

18 Net income from the held-for-trading portfolio
The net income from the held-for-trading portfolio (net trading income) of €652 million (2016: €572 million) includes the offset income and expenses arising from transactions involving financial instruments held for trading purposes, complete with the full net income from FX operations. Also carried here are certain fees and commissions in connection with transactions involving financial instruments held for proprietary trading purposes and trading with precious metals. We carry the current interest income/expense resulting from held-for-trading portfolios (so-called trading-induced interest) as well as dividend income in net interest income and in current income rather than in net trading income in accordance with our internal management.

19 Breakdown of other operating income and expenses
This item primarily includes income from the reversal of provisions other than provisions for lending and securities operations (€177 million (2016: €142 million)), payroll costs and cost of materials passed on (€65 million (2016: €65 million)) and the recognition of income from services performed in earlier years (€11 million (2016: €7 million)).

Other operating expenses include the following:
– compensation and ex gratia payments (€13 million (2016: €32 million))
– additions to provisions other than provisions for lending and securities operations (€44 million (2016: €200 million))
– expenses of €19 million (2016: €24 million) arising from the compounding and discounting of other provisions in the non-lending business as well as
– expenses of €4 million (2016: €1 million) related to other periods

20 Expenses from absorbed losses
As in the previous year, there was no expense from an absorbed loss in other accounting periods in the 2017 financial year.

21 Extraordinary income/expenses
In the course of the changeover to the BilMoG in 2010, HVB exercised the option compliant with Section 67 (1) 1 EGHGB of aggregating at least one-fifteenth of the amount allocable to the provisions for pensions in every financial year up to 31 December 2024 at the latest. The outstanding allocation amount of €130 million was fully written up in the 2017 financial year and charged to extraordinary income/expenses in the income statement.

22 Taxes on income and net income
The current taxes on income of €158 million include a net tax income of €134 million from earlier years.

The profit available for distribution amounts to €1,300 million. We will propose to the Shareholders' Meeting that a dividend of €1,300 million be paid to UniCredit S.p.A. (UniCredit), Milan, Italy. This represents a dividend of around €1.62 per share after around €3.75 in 2016. In accordance with a resolution adopted by the Shareholders' Meeting on 22 May 2017, the profit available for distribution of €3,005 million (consisting of the net income of €5 million and a withdrawal from other retained earnings of €3,000 million) disclosed in 2016 was distributed to UniCredit.

Notes to the Balance Sheet

23 Breakdown by maturity of selected asset items

The following table shows the breakdown by maturity of selected asset items:

(€ millions)

		2017	2016
A 3 b)	Other loans and receivables with banks		
	with residual maturity of less than 3 months	9,452	12,030
	at least 3 months but less than 1 year	11,530	10,495
	at least 1 year but less than 5 years	5,977	6,153
	5 years or more	737	732
A 4	Loans and receivables with customers		
	with residual maturity of less than 3 months	9,704	10,157
	at least 3 months but less than 1 year	7,415	7,111
	at least 1 year but less than 5 years	28,965	30,014
	5 years or more	38,539	38,002
	No fixed maturity	8,579	9,205
A 5	Bonds and other fixed-income securities, amounts due in the following year	10,452	12,073

24 Breakdown by maturity of selected liability items

The following table shows the breakdown by maturity of selected liability items:

(€ millions)

		2017	2016
L 1	Deposits from banks		
L 1b)	with agreed maturity dates or periods of notice		
	with residual maturity of less than 3 months	23,793	21,614
	at least 3 months but less than 1 year	5,948	6,350
	at least 1 year but less than 5 years	17,956	10,309
	5 years or more	5,709	5,201
L 2	Deposits from customers		
L 2 ab)	savings deposits with agreed maturity dates or periods of notice		
	with residual maturity of less than 3 months	6	11
	at least 3 months but less than 1 year	13	16
	at least 1 year but less than 5 years	40	28
	5 years or more	—	1
L 2 b)	registered Mortgage Pfandbriefs in issue		
L 2 c)	registered Public Pfandbriefs in issue		
L 2 db)	other debts with agreed maturity dates or periods of notice		
	with residual maturity of less than 3 months	18,119	16,349
	at least 3 months but less than 1 year	10,398	9,529
	at least 1 year but less than 5 years	7,395	4,721
	5 years or more	8,158	8,590
L 3	Debt securities in issue		
L 3 a)	Bonds, amounts due in following year	2,718	3,549
L 3 b)	other debt securities in issue		
	with residual maturity of less than 3 months	3	—
	at least 3 months but less than 1 year	—	—
	at least 1 year but less than 5 years	—	—
	5 years or more	—	—

Notes to the Balance Sheet (Continued)

25 Amounts receivable from and payable to affiliates and companies in which participating interests are held

(€ millions)

	2017		2016	
	AFFILIATES	PARTICIPATING INTERESTS	AFFILIATES	PARTICIPATING INTERESTS
Loans and receivables with banks	14,021	184	14,903	169
of which: UniCredit S.p.A.	3,217	—	1,777	—
Loans and receivables with customers	2,039	508	3,438	599
Bonds and other fixed-income securities	3	5,703	3	5,669
of which: UniCredit S.p.A.	—	—	—	—
Deposits from banks	9,456	109	5,089	138
of which: UniCredit S.p.A.	5,749	—	929	—
Deposits from customers	638	447	938	583
Debt securities in issue	125	—	321	—
of which: UniCredit S.p.A.	—	—	—	—
Subordinated liabilities	463	—	264	—

There have been a number of transactions involving UniCredit S.p.A. and other UniCredit group companies since the integration of HVB into the UniCredit group of companies.

In its role as centre of competence for markets and investment banking for the entire UniCredit group, HVB acts as counterparty for derivative transactions conducted by UniCredit companies. For the most part, this involves hedge derivatives of UniCredit group companies that are externalised on the market by HVB.

26 Trust business

Trust business assets and liabilities break down as follows:

(€ millions)

	2017	2016
Trust assets	**4**	**3**
Loans and receivables with banks	—	—
Loans and receivables with customers	4	3
Equity securities and other variable-yield securities	—	—
Participating interests	—	—
Other assets	—	—
Trust liabilities	**4**	**3**
Deposits from banks	4	3
Deposits from customers	—	—
Debt securities in issue	—	—
Other liabilities	—	—

There were no significant changes in trustee activities compared with last year.

27 Foreign-currency assets and liabilities

(€ millions)

	2017	2016
Assets	**39,923**	**44,609**
Cash and cash balances	2,266	1,700
Treasury bills and other bills eligible for refinancing with central banks	4	—
Loans and receivables with banks	3,550	3,152
Loans and receivables with customers	14,386	16,030
Bonds and other fixed-income securities	3,190	3,386
Equity securities and other variable-yield securities	—	—
Held-for-trading portfolio (assets held for trading purposes)	16,350	20,150
Participating interests	8	8
Shares in affiliated companies	76	85
Trust assets	—	—
Intangible assets	—	—
Property, plant and equipment	4	5
Other assets	83	88
Prepaid expenses	6	5
Liabilities	**34,512**	**41,342**
Deposits from banks	11,257	13,504
Deposits from customers	10,202	7,634
Debt securities in issue	2	12
Held-for-trading portfolio (liabilities held for trading purposes)	12,319	19,362
Trust liabilities	—	—
Other liabilities	129	177
Deferred income	43	57
Provisions	410	428
Subordinated liabilities	150	168

The amounts shown represent the euro equivalents of all currencies.

28 Subordinated asset items

The following balance sheet items contain subordinated assets:

(€ millions)

	2017	2016
Subordinated asset items	**2,398**	**2,568**
Loans and receivables with banks	320	321
Loans and receivables with customers	36	39
Bonds and other fixed-income securities	1,856	2,007
Equity securities and other variable-yield securities	—	—
Held-for-trading portfolio	186	201

Notes to the Balance Sheet (Continued)

29 Marketable debt and investments

The listed and unlisted marketable securities included in the respective balance sheet items break down as follows: (€ millions)

	2017			2016		
	TOTAL MARKETABLE SECURITIES	OF WHICH: LISTED	OF WHICH: UNLISTED	TOTAL MARKETABLE SECURITIES	OF WHICH: LISTED	OF WHICH: UNLISTED
Bonds and other fixed-income securities	48,695	39,497	9,198	53,447	43,089	10,358
Equity securities and other						
variable-yield securities	76	—	76	76	—	76
Held-for-trading portfolio	30,734	26,143	4,591	27,132	20,587	6,545
Participating interests	—	—	—	2	—	2
Shares in affiliated companies	—	—	—	—	—	—

Non-current marketable securities contain financial instruments carried at an amount higher than their fair value. (€ millions)

	2017		2016	
	CARRYING AMOUNT	FAIR VALUE	CARRYING AMOUNT	FAIR VALUE
Non-current securities	**2,888**	**2,857**	**2,472**	**2,365**
Bonds and other fixed-income securities	2,888	2,857	2,472	2,365
Equity securities and other variable-yield securities	—	—	—	—

Given the development of interest and rating risks, we do not believe that these securities have suffered a permanent loss of value.

30 Held-for-trading portfolio

The following table shows the breakdown of assets held for trading purposes (asset item 6a) by financial instruments: (€ millions)

	2017	2016
Assets held for trading	**49,875**	**54,505**
Derivative financial instruments (positive fair values)	11,198	14,245
Loans and receivables	4,357	10,788
Bonds and other fixed-income securities	16,163	14,891
Equity securities and other variable-yield securities	16,129	13,845
Other assets	2,052	764
Less risk discount (for entire portfolio of assets held for trading purposes)	(24)	(28)

The following table shows the breakdown of liabilities held for trading purposes (liability item 3a) by financial instruments: (€ millions)

	2017	2016
Liabilities held for trading	**27,258**	**31,900**
Derivative financial instruments (negative fair values)	7,590	10,799
Liabilities (including delivery obligations arising from short sales of securities)	19,668	21,101

Derivatives held for trading purposes that were concluded under master agreements together with a credit support annex allowing for daily exchange of collateral were netted for each counterparty in the balance sheet. The netting for each counterparty encompasses both the carrying amount of the derivatives and the collateral provided. This involved netting positive fair values of €32.6 billion (2016: €44.6 billion) with negative fair values of €33.7 billion (2016: €46.1 billion) on derivatives held for trading with the associated receivables (€7.9 billion, 2016: €9.2 billion) and liabilities (€6.9 billion, 2016: €7.7 billion) from collateral provided.

31 Investment funds

The following table contains information regarding shares in investment funds compliant with Section 285 No. 26 HGB for which the Bank's holding exceeds 10% of the total number of shares: (€ millions)

	2017				2016			
	CARRYING AMOUNT	FAIR VALUE	DIFFERENCE CARRYING AMOUNT/ FAIR VALUE	DIVIDEND PAYMENTS	CARRYING AMOUNT	FAIR VALUE	DIFFERENCE CARRYING AMOUNT/ FAIR VALUE	DIVIDEND PAYMENTS
Total investment funds	**1,194**	**1,199**	**5**	**4.1**	**934**	**938**	**4**	**1.7**
Equity funds	214	214	—	—	156	156	—	0.1
Money market funds and near-money market funds	20	20	—	—	20	20	—	0.1
Mixed funds	455	460	5	0.8	308	312	4	0.5
Index funds	189	189	—	0.1	163	163	—	—
Bond funds	173	173	—	1.0	130	130	—	0.2
Funds of funds	143	143	—	2.2	157	157	—	0.8

In addition, the Bank holds all the shares in the "European-Office-Fonds" property special purpose entity, which is fully consolidated in the Bank's consolidated financial statements in accordance with IFRS 10.

Under Section 246 (2) HGB, assets to which all other creditors do not have access and which serve exclusively to settle liabilities arising from pension commitments or similar long-term commitments must be offset against these liabilities. Where these assets represent shares in investment funds, they are not shown in this table.

The shares listed in this table are held in either the Bank's held-for-trading portfolio or its liquidity reserve. Where necessary, the holdings in the liquidity reserve are always written down to the lower fair value.

In the case of the information regarding the dividend payments, it should be noted that the positions included in the table frequently represent investment funds that reinvest dividends in themselves. Consequently, the dividend payments shown in the table serve only as a limited indicator for the performance of the investment funds.

There are no indications of a restriction on daily return for the shares listed here.

Notes to the Balance Sheet (Continued)

32 Analysis of non-current assets

(€ millions)

	INTANGIBLE ASSETS				PROPERTY, PLANT AND EQUIPMENT			
	SOFTWARE	DOWN-PAYMENTS	OTHER INTANGIBLE ASSETS	TOTAL	LAND AND BUILDINGS USED BY HVB IN ITS OPERATIONS	FURNITURE AND OFFICE EQUIPMENT	TOTAL	OTHER NON-CURRENT ASSETS
Acquisition/Production costs								
Balance at 1/1	506	3	—	509	200	224	424	21
Additions	2	1	—	3	—	4	4	—
Disposals	3	—	—	3	9	4	13	—
Reclassifications[1]	3	(3)	—	—	(3)	(6)	(9)	—
Post-capitalization	—	—	—	—	—	—	—	—
Balance at 31/12	508	1	—	509	188	218	406	21
Depreciation/Amortisation								
Balance at 1/1	493	—	—	493	109	155	264	—
Additions	9	—	—	9	7	11	18	—
thereof non-scheduled	—	—	—	—	1	—	1	—
Disposals	3	—	—	3	5	4	9	—
Reclassifications[1]	—	—	—	—	(3)	(5)	(8)	—
Write-ups	—	—	—	—	3	—	3	—
Balance at 31/12	499	—	—	499	105	157	262	—
Net Book Value								
Balance at 1/1	13	3	—	16	91	69	160	21
Balance at 31/12	9	1	—	10	83	61	144	21

1 including changes in value due to currency translation

(€ millions)

	ACQUISITION COST	CHANGES +/–[1]	NET BOOK VALUE 31/12/2017	NET BOOK VALUE 31/12/2016
Participating interests	190	(101)	89	174
Shares in affiliated companies	2,557	(168)	2,389	2,484
Investment securities	10,769	(1,071)	9,698	10,769

1 use has been made of the possibility of combining amounts allowed by Section 34 (3) RechKredV

33 Other assets

The following table shows the main items included in other assets:

(€ millions)

	2017	2016
Claims to dividends from affiliated companies	160	84
Claims to tax reimbursements	135	414
thereof:		
Claims arising from income tax	109	332
Claims arising from non-income taxes	26	82
Proportion of income from commission/interest not yet received	76	64
Proportion of income from portfolio fees	29	29
Capital investments with life insurers	25	27
Works of art	21	21
Trade debtors	20	34

34 Prepaid expenses

The prepaid expenses arising from issuing and lending operations include the following:

(€ millions)

	2017	2016
Discounts on funds borrowed	36	31
Premiums on amounts receivable	1	1

35 Excess of plan assets over pension liabilities

An amount payable of €1,357 million arising from liabilities due to pension and similar commitments was set against offsetting plan assets with a fair value of €1,645 million. Under the initial application provisions of the BilMoG, use was made of the option compliant with Article 67 (1) 1 EGHGB to aggregate at least one-fifteenth of the amount allocable to the provisions for pensions in every financial year up to 31 December 2024 at the latest. An amount of €69 million was allocated to provisions for pensions in the 2016 financial year. This amount includes the write-up of the part of the transitional allocation attributable to the transfer of further assets and liabilities to HVB Trust Pensionsfonds AG, Munich. The outstanding amount of €130 million allocable to provisions for pensions was fully written up in the 2017 financial year. The excess of assets over commitments is disclosed in the balance sheet as the excess of plan assets over pension liabilities (€288 million). The acquisition cost of the offsetting plan assets totalled €1,444 million. The assets involved are essentially fund shares, subordinated bonds, investments, and cash and cash equivalents.

(€ millions)

	2017	2016
Amount payable for offset pension and similar commitments (average interest rate 7 years)	1,588	1,374
Amount payable for offset pension and similar commitments (average interest rate 10 years)	1,357	1,201
Fair value of the offsetting plan assets	1,645	1,599
Omitted transitional allocation	—	130
Excess of plan assets over the commitments, including the shortfall	288	528
Acquisition cost of the offsetting plan assets	1,444	1,420

Notes to the Balance Sheet (Continued)

The following table shows the surplus from pension commitments contained in other operating expenses: (€ millions)

	2017	2016
Surplus from pension commitments	**(5)**	**(11)**
Income from plan assets used to offset pension and similar commitments	40	94
Expense component of the change in provisions for pensions and similar commitments	45	56
Expenses from plan assets used to offset pension and similar commitments	—	49

36 Assets assigned or pledged as security for own liabilities

Assets were assigned or pledged as security for the following liabilities: (€ millions)

	2017	2016
Assets assigned or pledged as security for own liabilities	**40,216**	**43,044**
Deposits from banks	27,177	28,041
Deposits from customers	13,039	15,003

In addition, collateral is pledged to the ECB, irrespective of whether this is actually used to borrow funds or not. At 31 December 2017, the volume of pledged collateral amounted to €16.3 billion (2016: €23.0 billion).

Examples of own liabilities for which HVB provides collateral are special credit facilities provided by KfW and similar institutions, which the Bank has passed on as loans in compliance with their conditions.

As a seller under repurchase agreements, HVB has transferred assets with a book value of €29.9 billion (2016: €33.4 billion) to its funding partners. The total includes €7.2 billion (2016: €6.4 billion) relating to own securities holdings. These securities continue to be disclosed as HVB's assets. The consideration received in return is stated under liabilities. They comprise mainly international money market transactions.

At the same time, further assets totalling €12.6 billion (2016: €13.6 billion) were pledged as security for securities lending transactions and exchange-traded derivatives.

In setting up a contractual trust arrangement (CTA), HVB transferred collateral to the asset administrator to hedge pension and semi-retirement obligations. Pursuant to Section 8a AltTZG, employers are required to hedge credit exceeding three times the amount of normal earnings, including the associated employer's contribution to the total social security charge, against the risk of insolvency. Recognised provisions and obligations to cover the costs of other group companies are not considered suitable means of security.

37 Other liabilities

The following table shows the main items included in other liabilities:

(€ millions)

	2017	2016
Amounts owed to special purpose entities	5,657	5,657
Obligations arising from debts assumed	339	332
Other amounts owed to employees	90	100
Taxes payable	45	110
Trading book valuation reserves	12	11
Amounts yet to be distributed from outplacements, etc.	7	3
Liabilities from losses absorbed from subsidiaries	2	13

The true sale transactions included under amounts owed to special purpose entities were carried out with a view to using the securities generated as collateral for repurchase agreements with the ECB. The underlying receivables are still recognised by HVB. All tranches are retained by the Bank, meaning that there is no corresponding reduction in risk-weighted assets.

The obligations arising from debts assumed essentially reflect obligations arising from the liquidation of media funds.

The taxes payable mainly include liabilities from non-income taxes of €42 million (2016: €110 million).

38 Deferred income

Discounts on amounts receivable shown at nominal value totalled €13 million (2016: €12 million). Furthermore, other deferred income includes accrued commissions of €13 million (2016: €24 million), processing fees of €64 million (2016: €66 million) and interest of €42 million (2016: €53 million) collected in advance.

Notes to the Balance Sheet (Continued)

39 Provisions

Other provisions include the following items:

(€ millions)

	2017	2016
Total other provisions	**2,569**	**2,939**
Provisions for losses on guarantees and indemnities	228	218
Anticipated losses on pending transactions	—	—
Provisions for uncertain liabilities	2,341	2,721
thereof:		
Legal risks	603	676
Valuation units	372	418
Restructuring	356	574
Payments to employees	334	279
Payments for early retirement, semi-retirement, etc.	173	102
Anniversary bonus payments	34	38
Bonuses on saving plans	11	18
Other	458	616

The provisions for legal risks shown under provisions for uncertain liabilities contain provisions for litigation fees and damage payments. The other provisions include provisions for pre-emptive rights and dismantling obligations, among other things.

40 Subordinated liabilities

This item includes accrued interest of €3 million (2016: €3 million). HVB incurred interest expenses of €25 million on subordinated liabilities as at 31 December 2017 (2016: €27 million).

The borrower cannot be obliged to make early repayment in the case of subordinated liabilities. In the event of insolvency or liquidation, subordinated loans are only repaid after the claims of all primary creditors have been settled. For the purposes of a bank's liable funds as defined under banking supervisory regulations, subordinated liabilities are regarded as supplementary capital.

On 25 January 2001, HVB issued a subordinated promissory note with a volume of €96 million. This subordinated promissory note matures on 27 January 2031 and bears interest at the 6-month Euribor rate, taking account of a surcharge of 0.65% p.a. for the entire term.

Shareholders' Equity

41 Analysis of shareholders' equity shown in the balance sheet

(€ millions)

a) Called-up capital		
Subscribed capital		
Balance at 1 January 2017	2,407	
Balance at 31 December 2017		2,407
b) Additional paid-in capital		
Balance at 1 January 2017	9,791	
Balance at 31 December 2017		9,791
c) Retained earnings		
ca) Legal reserve		
Balance at 1 January 2017	—	
Balance at 31 December 2017		—
cb) Reserve for shares in a controlling or majority interest-holding company		
Balance at 1 January 2017	8	
Transfer to the reserve for shares in a controlling or majority interest-holding company	2	
Balance at 31 December 2017		10
cc) Reserve set up under the Articles of Association		
Balance at 1 January 2017	—	
Balance at 31 December 2017		—
cd) Other retained earnings		
Balance at 1 January 2017	3,147	
Withdrawal for transfer of the reserve for shares in a controlling or majority interest-holding company	(2)	
Withdrawal from retained earnings	—	
Balance at 31 December 2017		3,145
d) Profit available for distribution		
Balance at 1 January 2017	3,005	
Dividend payout of HVB for 2016	(3,005)	
Withdrawal from retained earnings	—	
Net profit 2017	1,300	
Balance at 31 December 2017		1,300
Shareholders' equity		
Balance at 31 December 2017		16,653

Shareholders' Equity (Continued)

42 Holdings of HVB stock in excess of 5%

(in %)

	2017	2016
UniCredit S.p.A.	100.0	100.0

Compliant with Section 271 (2) HGB, HVB is an affiliated company of UniCredit S.p.A., Milan, Italy, and is included in the consolidated financial statements of UniCredit, which can be obtained from the Trade and Companies Register in Milan, Italy.

43 Amounts not available for distribution

The measurement at fair value of offsetting plan assets in connection with pension commitments and semi-retirement agreements gives rise to an amount of €200 million (2016: €179 million). The amount not available for distribution arising from the difference between the valuation of the provisions for pension commitments based on the respective average market rate of the past ten financial years and their valuation based on the respective average market rate of the past seven financial years totalled €231 million at year-end 2017. Freely disposable provisions have been set up to cover the amount not available for distribution.

44 List of shareholdings pursuant to Section 285 No. 11, 11a HGB, Section 340a (4) HGB

A complete list of shareholdings as a constituent part of the notes to the financial statements is given in the section entitled "List of Holdings" in this Annual Report.

Other Information

45 Report on subsequent events (events after the end of the reporting period)

At its meeting on 16 February 2018, the Supervisory Board appointed Jan Kupfer and Dr Emanuele Buttà as members of the Management Board with effect from 1 March 2018. Mr Kupfer will be in charge of the Corporate & Investment Banking business segment and succeeds Dr Michael Diederich, who was appointed Board Spokesman of UniCredit Bank AG as per 1 January 2018. Dr Emanuele Buttà is taking over the Private Clients Bank business unit from Peter Buschbeck which together with the Unternehmer Bank business unit constitutes the Commercial Banking business segment of the Bank.

46 Contingent liabilities and other financial commitments

The following table shows the breakdown of contingent liabilities arising from guarantees and indemnity agreements totalling €36,458 million:

(€ millions)

	2017	2016
Guarantees and indemnities	16,751	17,526
Loan guarantees	16,300	15,290
Documentary credits	3,407	3,202
Total	**36,458**	**36,018**
thereof to:		
affiliated companies	16,925	16,713
associated companies	1	—

Irrevocable lending commitments totalling €41,774 million break down as follows:

(€ millions)

	2017	2016
Book credits	35,918	34,889
Mortgage and municipal loans	3,023	2,866
Guarantees	2,833	3,211
Bills of exchange	—	—
Total	**41,774**	**40,966**
thereof to:		
affiliated companies	568	673
associated companies	—	—

Utilisation by the Bank on account of the contingent liabilities and other commitments that it has entered into is possible as part of its banking activities. Thus, every loan is fundamentally granted by utilising a previously made lending commitment that is shown under other commitments. Although utilisation by the Bank under contingent liabilities is not very probable in the case of guarantees it has issued, the possibility cannot be excluded. Utilisation is also the general case with regard to the documentary credits also shown here, as these are employed in the handling of foreign trade payments.

The key factor in this regard is that utilisation by the Bank under its contingent liabilities and other commitments does not generally lead to a loss. Instead, it results in the loan granted being recognised as is the case when a lending commitment is utilised. Provisions for anticipated losses on pending transactions that are required due to commitments to make payouts to defaulting borrowers are set up and deducted from the disclosed contingent liabilities and other commitments.

Other Information (Continued)

HVB has made use of the option to provide up to 15% (2016: 15%) of the annual contribution to the bank restructuring fund in the form of fully secured payment claims (irrevocable payment commitments) in accordance with Section 12 of the German Bank Restructuring Fund Act (Restrukturierungsfondsgesetz – RStruktFG). The cash collateral provided in this regard amounted to €48 million at year-end 2017 (2016: €34 million).

HVB has made use of the option to provide up to 30% of the annual contribution to the compensation scheme of German banks in the form of fully secured payment claims (irrevocable payment commitments) in accordance with Section 19 of the Regulation on the Financing of the Compensation Scheme of German Banks (Entschädigungseinrichtungs-Finanzierungsverordnung – EntschFinV). The financial security provided in this regard amounted to €8 million at year-end 2017 (2016: €7 million).

Legal risks can give rise to losses for HVB, the occurrence of which is greater than improbable but less than probable, and for which no provisions have been set up. Such legal risks may result from negative developments in proceedings under civil law and the tendency for rulings to be made in favour of consumers or customers. The assessment of the risk of loss may prove to be too low or too high, depending on the outcome of the proceedings. We assume that it will not be necessary to utilise the vast majority of the contingent liabilities arising from legal risks, meaning that the amounts are not representative of actual future losses. Such contingent liabilities arising from significant legal risks for which an estimate is possible amounted to €112 million at year-end 2017 after €162 million at year-end 2016.

Other financial commitments arising from real estate and IT operations total €759 million (2016: €808 million). A large part of the total relates to contracts with subsidiaries (€648 million (2016: €687 million)). The contracts run for standard market periods, and no charges have been put off to future years. Whereas in the previous year the commitments for one year were stated, this year we are showing the commitments arising under the expected remaining terms of the contracts. The previous year's figure has been adjusted accordingly.

At the reporting date on 31 December 2017, HVB had pledged securities worth €1,531 million (2016: €1,590 million) as collateral for transactions with Eurex Frankfurt AG, Frankfurt am Main.

As part of real estate financing and development operations, HVB has assumed rental obligations or issued rental guarantees and granted pre-emptive rights to make fund constructions more marketable – in particular for lease funds and (closed) KG real estate funds. Provisions have been set aside to cover identifiable risks arising from such guarantees.

Commitments for uncalled payments on shares not fully paid up amounted to €33 million at year-end 2017 (2016: €50 million), and similar obligations for shares in cooperatives totalled €1 thousand (2016: €1 thousand). HVB was not liable for any defaults on such calls under Section 22 (3) and Section 24 GmbHG.

Where employees are granted a bonus that is disbursed over a period of several years under their variable compensation arrangements, the expense is to be taken to the income statement over the period on a pro rata basis accordingly. Hence, an expense accrued for the bonus commitments for the years 2013 to 2017 in the reporting period. Especially in the case of the group of employees identified as "risk-takers", the German regulations governing institutions' remuneration systems (Instituts-Vergütungsverordnung) requires the bonus in a financial year to be disbursed over a period of several years. The bonus is granted subject to the proviso that the beneficiaries satisfy specific criteria (in the case of bonuses granted in the form of shares, stock options or deferred cash payments) that comply with both the regulatory requirements and the Bank's own rules. In addition, the bonus is linked to further conditions such as a malus arrangement that ensures that negative contributions to earnings and any compliance violations are taken into account when determining the deferred variable compensation components or when determining the bonus. Provisions totalling €144 million were set aside in the income statement at 31 December 2017 in connection with bonus commitments. The final amount disbursed may be higher, should the plan conditions be met.

In its function as personally liable shareholder, HVB had unlimited liability arising from shares in the partnership Bayerischer BankenFonds GbR at the balance sheet date (2016: Bayerischer BankenFonds GbR; Gesellschaft des bürgerlichen Rechts Industrie- und Handelskammer/Rheinisch-Westfälische Börse).

With a Statement of Responsibility dated 21 December 1993, HVB issued an undertaking to the State of Baden Wuerttemberg (Ministry of Finance) to assume a liquidity provision obligation in the event of the sale, liquidation or bankruptcy of HVB Projekt GmbH.

47 Statement of Responsibility

HVB ensures that, to the extent of its shareholding, the companies set forth below are in a position to meet their contractual obligations except in the event of political risks:

1. Banks
UniCredit Luxembourg S.A., Luxembourg
2. Financial companies
UniCredit Leasing GmbH, Hamburg

HVB's commitment arising from the above Statement of Responsibility declines by the extent to which HVB's shareholding decreases in the future with regard to such commitments of the relevant company that did not arise until after HVB's shareholding decreased. Where HVB is no longer a shareholder in a company listed above, our commitment arising from the above Statement of Responsibility ends on the date on which our holding ceased with regard to such liabilities of the relevant company that did not arise until our shareholding ceased.

HVB no longer provides a Statement of Responsibility for companies for which a Statement of Responsibility had been provided in earlier annual reports but which no longer appear in the above list. Liabilities of these companies arising before the reduction or cessation of the shareholding are only covered by such Statements of Responsibility that were provided before the reduction or cessation of the shareholding in each case.

48 Auditor's fees

We have made use of the option provided by Section 285 No. 17 HGB and refer to the disclosures regarding the fees paid to the independent auditors in the section of the consolidated financial statements at 31 December 2017 entitled "Other Information".

49 Off-balance-sheet transactions

Special purpose entities

HVB maintains business relations with a number of special purpose entities that pursue varying business models and hold various different types of assets. HVB's business relations with the special purpose entities are recognised in the financial statements either on or off the balance sheet.

The Bank uses special purpose entities to securitise both the Bank's own receivables and customer receivables. The latter involve commercial paper conduits for which the Bank provides guarantees and liquidity facilities.

In the case of the Bank's own receivables, the special purpose entities mainly serve to procure liquidity. These do not, however, result in the securitised receivables being taken off the books as they involve securitisation transactions with all risks retained to create securities as collateral with central banks. The securitisation of customer receivables is generally accompanied by an improvement in the customer's liquidity situation and a broadening of the funding base, whereby the Bank generates income from the structuring service and the facilities provided. HVB may face economic disadvantages, in particular, should the facilities provided be drawn down.

In addition, there are special purpose entities for which HVB acts solely as an investor, for instance to purchase securities or grant loans. The ensuing risks may lead to write-downs being recognised on the positions involved.

In some instances, HVB controls a special purpose entity from an economic point of view, which entails full consolidation of the special purpose entity in the consolidated financial statements of HVB.

Other Information (Continued)

Revocable credit commitments
HVB has granted its customers credit and liquidity facilities that are callable at any time and are not shown either on or off the balance sheet. The advantage for HVB from this customary, standardised product lies in the possibility of generating additional interest and commission income. This is set against the risk of a deterioration in the financial situation of those customers to whom these credit commitments were made.

Outsourcing of activities
Like other affiliated companies, HVB has outsourced IT activities and activities relating to the settlement of transactions to UniCredit Business Integrated Solutions S.C.p.A., Milan. The goal is to exploit synergies and make it possible to provide fast, high-quality IT services and to make settlement services available in line with a standard business and operating model.

HVB has outsourced activities in the fields of payments, document management and archiving in Germany and the settlement of securities transactions in Germany and at its Milan branch to external service providers. The purpose of this for HVB is to permanently reduce its operating costs.

50 Regulatory disclosure requirements (Disclosure Report)
HVB has been classified as a significant subsidiary of UniCredit within the meaning of Article 13 (1) of the Capital Requirements Regulation (CRR), making it subject to the scope of the CRR (Article 13 (1) and Part 8 CRR) and certain extended regulatory disclosure requirements in accordance with Section 26a KWG (disclosure under Pillar III).

HVB discloses this information on a standalone basis in the form of a separate disclosure report. This report is produced on an annual basis at 31 December and in addition at each quarter-end during the year and published on the Bank’s website under About us > Investor Relations > Reports. The publication for the reporting date at 31 December should appear shortly after publication of the Annual Report. The interim reports should be published shortly after submission of the regulatory COREP report to the supervisory authorities responsible.

The disclosure of the remuneration policy and practices for those categories of staff whose professional activities have a material impact on the Bank’s risk profile (known as “risk takers”) required by Article 450 CRR in conjunction with section 16 (1) of the German Regulation on the Requirements for the Remuneration Systems of Institutions under Regulatory Law (Institutsvergütungsverordnung – InstitutsVergV) takes the form of a separate report for HVB. This is drawn up once a year at 31 December and published on the Bank’s website under About us > Investor Relations > Corporate Governance in the second quarter of the following year.

51 Own funds
Pursuant to Article 72 CRR, for regulatory purposes own funds consists of Tier 1 capital and Tier 2 capital; they amounted to €16,398 million (year-end 2016: €16,073 million) at year-end 2017 based on annual financial statements approved by the Supervisory Board. We have not allocated any unrealised reserves to Tier 2 capital compliant with Section 10 (2b) KWG as applicable until 31 December 2013.

The eligible capital calculated in accordance with Article 4 (1) (71)(b) in conjunction with Article 494 CRR are used primarily to determine thresholds for large exposures and loans to executive board members and for investment limits. It amounted to €16,398 million (year-end 2016: €16,073 million) at year-end 2017.

52 Derivative financial instruments

The following table provides detailed information about the nominal amount and fair values of all derivative transactions and credit derivative transactions of HVB:

(€ 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	2017	2016	2017	2016	2017	2016
Interest rate derivatives	**633,326**	**850,343**	**784,086**	**2,267,755**	**2,066,289**	**48,244**	**60,988**	**44,136**	**57,880**
OTC products									
Forward rate agreements	42,402	—	—	42,402	67,869	2	5	2	2
Interest rate swaps	491,432	765,582	684,252	1,941,266	1,705,298	44,089	57,257	39,234	50,012
Interest rate options									
– purchased	7,212	36,319	52,845	96,376	106,788	3,467	3,507	383	195
– written	10,369	38,845	46,989	96,203	99,813	435	153	4,254	5,736
Other interest									
rate derivatives	22	29	—	51	310	—	65	1	68
Exchange-traded products									
Interest rate futures	33,299	9,568	—	42,867	47,641	—	—	—	1,867
Interest rate options	48,590	—	—	48,590	38,570	251	1	262	—
Foreign exchange derivatives	**269,246**	**34,208**	**6,215**	**309,669**	**327,049**	**3,511**	**5,424**	**3,832**	**6,011**
OTC products									
Foreign exchange forwards	223,975	22,635	1,003	247,613	263,711	3,027	4,667	3,211	5,211
Foreign exchange options									
– purchased	22,206	5,823	2,678	30,707	31,780	343	597	175	161
– written	22,801	5,750	2,534	31,085	31,554	132	160	446	639
Other foreign									
exchange derivatives	262	—	—	262	—	9	—	—	—
Exchange-traded products									
Foreign exchange futures	2	—	—	2	4	—	—	—	—
Foreign exchange options	—	—	—	—	—	—	—	—	—
Cross-currency swaps	**43,662**	**93,174**	**44,867**	**181,703**	**191,581**	**4,405**	**6,545**	**3,948**	**6,801**
Equity/index derivatives	**43,515**	**33,272**	**10,655**	**87,442**	**78,942**	**2,111**	**2,251**	**2,914**	**3,186**
OTC products									
Equity/index swaps	6,211	5,920	636	12,767	9,994	160	204	163	302
Equity/index options									
– purchased	3,399	1,778	838	6,015	5,338	251	377	190	152
– written	13,716	7,934	4,458	26,108	26,930	70	58	593	641
Other equity/index									
derivatives	440	259	505	1,204	194	34	17	1	—
Exchange-traded products									
Equity/index futures	6,079	1,242	273	7,594	5,667	9	5	9	5
Equity/index options	13,670	16,139	3,945	33,754	30,819	1,587	1,590	1,958	2,086
Credit derivatives	**11,438**	**27,687**	**1,606**	**40,731**	**56,205**	**385**	**671**	**443**	**556**
Other transactions	**8,215**	**3,901**	**422**	**12,538**	**13,389**	**375**	**438**	**530**	**624**
HVB	**1,009,402**	**1,042,585**	**847,851**	**2,899,838**	**2,733,455**	**59,031**	**76,317**	**55,803**	**75,058**

Most of the derivatives are held for trading purposes.

The banking book contains derivatives with positive fair values of €1.5 billion (2016: €1.7 billion) and negative fair values of €0.7 billion (2016: €0.9 billion).

Other Information (Continued)

53 Employees

The average number of staff employed was as follows:

	2017	2016
Staff (excluding apprentices)	13,264	13,745
of whom:		
full-time	9,739	10,231
part-time	3,525	3,514
Apprentices	337	425

The staff's length of service was as follows: (in %)

STAFF'S LENGTH OF SERVICE	WOMEN (EXCLUDING TRAINEES)	MEN (EXCLUDING TRAINEES)	2017 TOTAL	2016 TOTAL
25 years or more	30.2	24.0	27.3	24.3
15 to 25 years	26.6	20.3	23.6	26.4
10 to 15 years	19.3	20.1	19.7	18.0
5 to 10 years	11.3	16.1	13.5	16.4
less than 5 years	12.6	19.5	15.9	14.9

54 Emoluments

(€ thousands)

	2017						
	SHORT-TERM COMPONENTS		LONG-TERM INCENTIVES				
	FIXED SALARY	SHORT-TERM PERFORMANCE-RELATED CASH REMUNERATION	LONG-TERM PERFORMANCE-RELATED CASH REMUNERATION	SHARE-BASED REMUNERATION	POST-EMPLOYMENT BENEFITS	TERMINATION BENEFITS	TOTAL
Members of the Management Board of UniCredit Bank AG	4,802	506	1,342	1,164	1,479	—	9,293
Members of the Supervisory Board of UniCredit Bank AG for Supervisory Board activities	790	—	—	—	—	—	790
Members of the Supervisory Board of UniCredit Bank AG for activities as employee representatives	386	31	—	—	30	—	447
Former members of the Management Board of UniCredit Bank AG and their surviving dependants	159	58	342	383	1,347	—	2,289

(€ thousands)

	2016						
	SHORT-TERM COMPONENTS		LONG-TERM INCENTIVES				
	FIXED SALARY	SHORT-TERM PERFORMANCE-RELATED CASH REMUNERATION	LONG-TERM PERFORMANCE-RELATED CASH REMUNERATION	SHARE-BASED REMUNERATION	POST-EMPLOYMENT BENEFITS	TERMINATION BENEFITS	TOTAL
Members of the Management Board of UniCredit Bank AG	5,910	916	998	1,600	1,597	—	11,021
Members of the Supervisory Board of UniCredit Bank AG for Supervisory Board activities	831	—	—	—	—	—	831
Members of the Supervisory Board of UniCredit Bank AG for activities as employee representatives	386	27	—	—	25	—	438
Former members of the Management Board of UniCredit Bank AG and their surviving dependants	377	136	307	537	1,382	—	2,699

It is the task of the Bank's full Supervisory Board to decide on the total remuneration paid to the individual members of the Management Board and to review the structure of the remuneration systems for the Management Board. The full Supervisory Board receives assistance in this regard from the Remuneration Control committee, which submits appropriate proposals to the full Supervisory Board. Appropriateness and sustainability are key criteria for the form and structure of the remuneration paid to the members of the Management Board. The structure of remuneration is derived from the service agreements with the members of the Management Board. It has two components: a fixed salary and a variable element. The variable remuneration is normally granted in deferred tranches over several years in the form cash and in shares, with disbursement dependent upon defined corporate targets being achieved in the subsequent years.

Pension commitments for eight members of the Management Board are shown in the table alongside the direct emoluments. Six members of the Management Board took part in the employer-financed, fund-linked pension scheme for executives (known as AgfA) in 2017. The Bank will provide/has provided 35% of the fixed salary contributions (2017: €1,237 thousand; 2016: €1,243 thousand).

Other Information (Continued)

Non-monetary compensation and other fringe benefits are granted to members of the Management Board to the usual extent. The amounts involved are included in the totals for fixed remuneration shown.

Compensation paid to members of the Management Board for positions on supervisory boards of any UniCredit group companies is surrendered to HVB.

At 31 December 2017, there were provisions in the amount of €25.2 million (2016: €17.8 million) for pensions payable to former members of the Management Board and retired members of the Management Board of HVB and their surviving dependents, as calculated in accordance with actuarial principles using the projected unit credit method, taking into account anticipated future rises in pensions.

Share-based remuneration was granted to the members of the Management Board under the Group Incentive Scheme in the reporting period as follows:

SHARES GRANTED TO MEMBERS OF THE MANAGEMENT BOARD OF UNICREDIT BANK AG	2017	2016
Number of shares granted	248,064	372,176
Number of shares committed after capital measures in 2017	49,495	
Fair value on grant date (€)	14,030	3.462

55 Loans to executive board members

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

	2017			2016		
	LOANS AND ADVANCES	CONTINGENT LIABILITIES	LIABILITIES	LOANS AND ADVANCES	CONTINGENT LIABILITIES	LIABILITIES
Members of the Management Board						
and their related parties	2,401	10	8,156	1,416	—	7,896
Members of the Supervisory Board						
and their related parties	299	—	4,296	340	—	4,260

Members of the Supervisory Board and Management Board at HVB and their respective immediate family members are considered related parties.

Loans and advances were granted to members of the Management Board and their immediate family members in the form of overdraft facilities with an interest rate of 6% and a maturity until 2021 and mortgage loans with interest rates of between 1.36% and 5.13% falling due in the period from 2022 to 2037.

Loans and advances were granted to members of the Supervisory Board and their immediate family members in the form of planned overdraft facilities with interest rates of 10.63% and no fixed maturities, unplanned overdraft facilities with an interest rate of 10.63%, and mortgage loans with an interest rate of 1.92% falling due in 2035.

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

56 Supervisory Board

Gianni Franco Papa	**Chairman**
Florian Schwarz Dr Wolfgang Sprissler	**Deputy Chairmen**
Paolo Cornetta Beate Dura-Kempf Francesco Giordano Klaus Grünewald Werner Habich until 30 November 2017 Prof Dr Annette G. Köhler Dr Marita Kraemer Klaus-Peter Prinz Jens-Uwe Wächter until 30 September 2017 Oliver Skrbot since 1 December 2017 Christian Staack since 1 October 2017	**Members**

57 Management Board

Sandra Betocchi Drwenski since 1 November 2017	**Chief Operating Officer (COO)**
Peter Buschbeck	**Commercial Banking – Private Clients Bank**
Ljiljana Čortan since 1 January 2018	**Chief Risk Officer (CRO)**
Dr Michael Diederich	**Corporate & Investment Banking** **Board Spokesman** (since 1 January 2018) **Human Capital/Labour and Social Affairs** (since 1 January 2018)
Heinz Laber until 31 October 2017	**Chief Operating Officer (COO)**
Robert Schindler	**Commercial Banking – Unternehmer Bank**
Andrea Umberto Varese until 31 December 2017	**Chief Risk Officer (CRO)**
Dr Theodor Weimer until 31 December 2017	**Board Spokesman** **Human Capital/Labour and Social Affairs**
Guglielmo Zadra	**Chief Financial Officer (CFO)**

List of Executives and Outside Directorships

58 Supervisory Board

NAME, OCCUPATION, PLACE OF RESIDENCE	POSITIONS ON STATUTORY SUPERVISORY BOARDS OF OTHER GERMAN COMPANIES[1]	POSITIONS ON COMPARABLE BOARDS OF GERMAN AND FOREIGN COMPANIES[1]
Gianni Franco Papa General Manager of UniCredit S.p.A., Vienna Chairman		UniCredit Bank Austria AG, Vienna, Bank Polska Kasa Opieki Spółka Akcyjna (BANK PEKAO SA), Warsaw, until 7 June 2017
Florian Schwarz Employee of UniCredit Bank AG, Munich Deputy Chairman		
Dr Wolfgang Sprissler Former Board Spokesman of UniCredit Bank AG, Sauerlach Deputy Chairman		Dr. R. Pfleger Chemische Fabrik Gesellschaft mit beschränkter Haftung, Bamberg (Deputy Chairman)
Paolo Cornetta Head of Group Human Capital of UniCredit S.p.A., Milan		ES Shared Service Center S.p.A., Cernusco sul Naviglio/Milan, UniCredit Bank Austria AG, Vienna, since 19 April 2017
Beate Dura-Kempf Employee of UniCredit Bank AG, Litzendorf		
Francesco Giordano Co-Chief Operating Officer of UniCredit S.p.A., Milan		UniCredit Business Integrated Solutions S.C.p.A., Milan, Pioneer Asset Global Management S.p.A., Milan, until 3 July 2017
Klaus Grünewald FB1 unit manager in the Bavarian division of Vereinte Dienstleistungsgewerkschaft, Gröbenzell	Fiducia & GAD IT AG, Frankfurt am Main, until 29 June 2017	
Werner Habich until 30 November 2017 Employee of UniCredit Bank AG, Mindelheim		

1 as of 31 December 2017

NAME, OCCUPATION, PLACE OF RESIDENCE	POSITIONS ON STATUTORY SUPERVISORY BOARDS OF OTHER GERMAN COMPANIES[1]	POSITIONS ON COMPARABLE BOARDS OF GERMAN AND FOREIGN COMPANIES[1]
Prof Dr Annette G. Köhler University professor and Chair of Accounting, Auditing and Controlling, University of Duisburg-Essen, Faculty of Business Administration – Mercator School of Management, Düsseldorf	Value-Holdings Capital Partners AG, Gersthofen, until 26 April 2017, DMG MORI AKTIENGESELLSCHAFT, Bielefeld, since 5 May 2017	
Dr Marita Kraemer Former member of the Management Board of Zurich GI Management Aktiengesellschaft (Deutschland), and former member of the Management Board of Zurich Service GmbH, Frankfurt am Main		EULER HERMES GROUP S.A., Paris, Allianz France S.A., Paris
Klaus-Peter Prinz Employee of UniCredit Luxembourg S.A., Trier		
Oliver Skrbot since 1 December 2017 Employee of UniCredit Bank AG, Buttenwiesen		
Christian Staack since 1 October 2017 Employee of UniCredit Bank AG, Hamburg		
Jens-Uwe Wächter until 30 September 2017 Employee of UniCredit Bank AG, Himmelpforten		

1 as of 31 December 2017

List of Executives and Outside Directorships (Continued)

59 Management Board

NAME	POSITIONS ON STATUTORY SUPERVISORY BOARDS OF OTHER GERMAN COMPANIES[1]	POSITIONS ON COMPARABLE BOARDS OF GERMAN AND FOREIGN COMPANIES[1]
Sandra Betocchi Drwenski born 1958 since 1 November 2017 Chief Operating Officer (COO)	HVB Immobilien AG, Munich (Chairwoman)[2], since 1 November 2017	UnCredit Business Integrated Solutions S.C.p.A., Milan
Peter Buschbeck born 1961 Commercial Banking – Private Clients Bank	Bankhaus Neelmeyer Aktiengesellschaft, Bremen (Chairman)[2], until 31 March 2017, WealthCap Kapitalverwaltungsgesellschaft mbH, Munich (Deputy Chairman)[2], Wüstenrot & Württembergische AG, Stuttgart	Wealth Management Capital Holding GmbH, Munich (Deputy Chairman)[2]
Dr Michael Diederich born 1965 Corporate & Investment Banking	Bayerische Börse Aktiengesellschaft, Munich (Deputy Chairman)	PORR AG, Vienna, ESMT European School of Management and Technology GmbH, Berlin
Heinz Laber born 1953 until 31 October 2017 Chief Operating Officer (COO)	HVB Immobilien AG, Munich (Chairman)[2], until 31 October 2017, HVB Trust Pensionsfonds AG, Munich (Chairman)	BVV Versorgungskasse des Bankgewerbes e. V., Berlin (Chairman), BVV Versicherungsverein des Bankgewerbes a.G., Berlin (Chairman), UniCredit Business Integrated Solutions S.C.p.A., Milan, Deputy Chairman, until 10 April 2017
Robert Schindler born 1964 Commercial Banking – Unternehmer Bank		UniCredit Leasing GmbH, Hamburg (Chairman)[2], UniCredit Leasing Finance GmbH, Hamburg (Chairman)[2]
Andrea Umberto Varese born 1964 until 31 December 2017 Chief Risk Officer (CRO)	HVB Immobilien AG, Munich[2], WealthCap Kapitalverwaltungsgesellschaft mbH, Munich[2]	UniCredit Luxembourg S.A., Luxembourg (Chairman)[2], Wealth Management Capital Holding GmbH, Munich[2], UniCredit Bank Austria AG, Vienna, since 27 November 2017
Dr Theodor Weimer born 1959 until 31 December 2017 Board Spokesman Human Capital/Labour & Social Affairs	FC Bayern München AG, Munich, Thyssen'sche Handelsgesellschaft mit beschränkter Haftung, Mülheim an der Ruhr, since 1 January 2017	
Guglielmo Zadra born 1972 Chief Financial Officer (CFO)		

1 as of 31 December 2017
2 Group directorship

60 List of employees and outside directorships

NAME	POSITIONS[1] ON STATUTORY SUPERVISORY BOARDS OF OTHER COMPANIES
Matthias Biebl	Wacker Chemie AG, Munich
Thomas Breiner	AGROB Immobilien AG, Ismaning[2]
Dr Bernhard Brinker	UniCredit Luxembourg S.A., Luxembourg[2]
Matthias Brückl	M&M Militzer & Münch International Holding GmbH, St. Gallen
Joachim Dobrikat	VALOVIS BANK AG, Essen
Matthias Glückert	OECHSLER AG, Ansbach
Stephanie Kraus-Nijboer	UniCredit Luxembourg S.A., Luxembourg[2]
Dr Andreas Mayer	UniCredit Luxembourg S.A., Luxembourg[2]
Gabriele Rauer	UniCredit Direct Services GmbH, Munich[2]
Dr Richard Wegener	UniCredit Direct Services GmbH, Munich[2]
Peter Weidenhöfer	AGROB Immobilien AG, Ismaning[2]

1 as of 31 December 2017
2 Group directorship

List of Holdings

61 List of Holdings

Compliant with Section 313 (2) German Commercial Code for the consolidated financial statements and Section 285 No. 11, 11a German Commercial Code and Section 340a (4) German Commercial Code for the annual financial statements of UniCredit Bank AG

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	SHARE OF CAPITAL IN % OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
1 Controlled companies						
1.1 Controlled by voting rights						
1.1.1 Consolidated subsidiaries						
1.1.1.1 Banks and financial institutions						
UniCredit Leasing Finance GmbH	Hamburg	100.0	100.0	EUR	160,013	[2]
UniCredit Luxembourg S.A.[11]	Luxembourg	100.0		EUR	1,342,482	69,303
1.1.1.2 Other consolidated subsidiaries						
Acis Immobilien- und Projektentwicklungs GmbH & Co.						
Oberbaum City KG[3]	Grünwald	100.0	100.0	EUR	33	4,905
Acis Immobilien- und Projektentwicklungs GmbH & Co.						
Parkkolonnaden KG[3]	Grünwald	100.0	100.0	EUR	34	(372)
Acis Immobilien- und Projektentwicklungs GmbH & Co.						
Stuttgart Kronprinzstraße KG[3]	Grünwald	100.0	100.0	EUR	41	563
AGROB Immobilien AG (share of voting rights: 75.0%)[4, 11]	Ismaning	52.7	52.7	EUR	25,218	1,913
Antus Immobilien- und Projektentwicklungs GmbH	Munich	90.0	90.0	EUR	(16,872)	
Argentaurus Immobilien-Vermietungs- und Verwaltungs GmbH[3]	Munich	100.0	100.0	EUR	793	[2]
ARRONDA Immobilienverwaltungs GmbH	Munich	100.0	100.0	EUR	(40,601)	975
Atlanterra Immobilienverwaltungs GmbH	Munich	90.0	90.0	EUR	(37,312)	950
A&T-Projektentwicklungs GmbH & Co.						
Potsdamer Platz Berlin KG[3]	Munich	100.0	100.0	EUR	(37,240)	
Aufbau Dresden GmbH	Munich	100.0	100.0	EUR	(23,944)	
Bayerische Wohnungsgesellschaft für Handel und Industrie,						
Gesellschaft mit beschränkter Haftung	Munich	100.0	100.0	EUR	294	[2]
Bertram Projekt Unodecima Technikzentrum GmbH & Co. KG	Hanover	94.0	94.0	EUR	(2,291)	306
B.I. International Limited	George Town	100.0	100.0	EUR	(254)	531
BIL Leasing-Fonds GmbH & Co VELUM KG						
(share of voting rights: 66.7%, of which 33.3% held indirectly)	Grünwald	100.0		EUR	(2)	0
BIL Leasing-Fonds Verwaltungs-GmbH	Grünwald	100.0	100.0	EUR	31	(1)
BV Grundstücksentwicklungs-GmbH[3]	Munich	100.0	100.0	EUR	511	[2]
BV Grundstücksentwicklungs-GmbH & Co. Verwaltungs-KG[3]	Munich	100.0		EUR	611	(111)
CUMTERRA Gesellschaft für Immobilienverwaltung mbH[3]	Munich	100.0	93.9	EUR	26	[2]
Delpha Immobilien- und Projektentwicklungs GmbH & Co.						
Großkugel Bauabschnitt Alpha Management KG[3]	Munich	100.0	100.0	EUR	(22,880)	
Delpha Immobilien- und Projektentwicklungs GmbH & Co.						
Großkugel Bauabschnitt Beta Management KG[3]	Munich	100.0	100.0	EUR	(53,477)	
Delpha Immobilien- und Projektentwicklungs GmbH & Co.						
Großkugel Bauabschnitt Gamma Management KG[3]	Munich	100.0	100.0	EUR	(59,493)	
Erste Onshore Windkraft Beteiligungsgesellschaft mbH & Co.						
Windpark Grefrath KG (share of voting rights: 68.3%)	Oldenburg	68.5	68.5	EUR	24	6
Erste Onshore Windkraft Beteiligungsgesellschaft mbH & Co.						
Windpark Krähenberg KG (share of voting rights: 68.3%)	Oldenburg	68.5	68.5	EUR	(326)	(5)
Erste Onshore Windkraft Beteiligungsgesellschaft mbH & Co.						
Windpark Mose KG (share of voting rights: 68.3%)	Oldenburg	68.5	68.5	EUR	(81)	(20)
Food & more GmbH[3]	Munich	100.0		EUR	235	[1.1]
GIMMO Immobilien-Vermietungs- und Verwaltungs GmbH	Munich	100.0	100.0	EUR	26	[2]
Golf- und Country Club Seddiner See Immobilien GmbH	Munich	100.0	100.0	EUR	(15,507)	
Grundstücksaktiengesellschaft am Potsdamer Platz						
(Haus Vaterland)	Munich	98.2	98.2	EUR	4,495	[2]

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN %		CURRENCY	EQUITY CAPITAL	NET PROFIT
		TOTAL	OF WHICH HELD INDIRECTLY		in thousands of currency units	in thousands of currency units
Grundstücksgesellschaft Simon beschränkt haftende Kommanditgesellschaft[3]	Munich	100.0	100.0	EUR	52	1,289
H & B Immobilien GmbH & Co. Objekte KG[3]	Munich	100.0	100.0	EUR	5	(1)
HAWA Grundstücks GmbH & Co. oHG Hotelverwaltung[3]	Munich	100.0	100.0	EUR	276	1,140
HAWA Grundstücks GmbH & Co. OHG Immobilienverwaltung[3]	Munich	100.0	100.0	EUR	54	496
H.F.S. Immobilienfonds GmbH	Ebersberg	100.0	100.0	EUR	26	[2]
H.F.S. Leasingfonds Deutschland 1 GmbH & Co. KG (Immobilienleasing)	Munich	99.4	99.4	EUR	19,756	3,297
H.F.S. Leasingfonds GmbH	Ebersberg	100.0	100.0	EUR	36	121
HJS 12 Beteiligungsgesellschaft mbH[3]	Munich	100.0		EUR	278	[1.2]
HVB Capital LLC	Wilmington	100.0		USD	1,128	87
HVB Capital LLC II	Wilmington	100.0		GBP	2	0
HVB Capital LLC III	Wilmington	100.0		USD	1,107	90
HVB Capital Partners AG[3]	Munich	100.0		EUR	12,671	[1.3]
HVB Export Leasing GmbH	Munich	100.0		EUR	39	0
HVB Funding Trust II	Wilmington	100.0		GBP	2	
HVB Gesellschaft für Gebäude Beteiligungs GmbH	Munich	100.0		EUR	29	0
HVB Gesellschaft für Gebäude mbH & Co KG[3]	Munich	100.0		EUR	871,401	26,676
HVB Hong Kong Limited	Hong Kong	100.0		USD	4,603	(15)
HVB Immobilien AG[3]	Munich	100.0		EUR	86,644	[1.4]
HVB Investments (UK) Limited	George Town	100.0		GBP	0	
HVB London Investments (AVON) Limited	London	100.0		GBP	0	
HVB Profil Gesellschaft für Personalmanagement mbH[3]	Munich	100.0		EUR	28	[1.5]
HVB Projekt GmbH[3]	Munich	100.0	94.0	EUR	72,151	[2]
HVB Secur GmbH[3]	Munich	100.0		EUR	126	[1.6]
HVB Tecta GmbH[3]	Munich	100.0	94.0	EUR	1,751	[2]
HVB Verwa 4 GmbH[3]	Munich	100.0		EUR	10,132	[1.7]
HVB Verwa 4.4 GmbH[3]	Munich	100.0	100.0	EUR	10,025	[2]
HVBFF International Greece GmbH	Munich	100.0	100.0	EUR	280	0
HVBFF Internationale Leasing GmbH	Munich	100.0	100.0	EUR	7	0
HVBFF Objekt Beteiligungs GmbH	Munich	100.0	100.0	EUR	33	(2)
HVZ GmbH & Co. Objekt KG[3]	Munich	100.0	100.0	EUR	148,091	4,525
Hypo-Bank Verwaltungszentrum GmbH	Munich	100.0	100.0	EUR	17	2
Hypo-Bank Verwaltungszentrum GmbH & Co. KG Objekt Arabellastraße[3]	Munich	100.0	100.0	EUR	26	(2,832)
HYPO-REAL Haus- und Grundbesitz Gesellschaft mbH & Co. Immobilien-Vermietungs KG[3]	Munich	80.0	80.0	EUR	(850)	
Interra Gesellschaft für Immobilienverwaltung mbH[3]	Munich	100.0	93.9	EUR	51	[2]
Life Management Erste GmbH	Munich	100.0	100.0	EUR	24	[2]
Life Management Zweite GmbH	Grünwald	100.0	100.0	EUR	24	[2]
MERKURHOF Grundstücksgesellschaft mit beschränkter Haftung[3]	Munich	100.0		EUR	16,692	[1.8]
MILLETERRA Gesellschaft für Immobilienverwaltung mbH[3]	Munich	100.0	100.0	EUR	25	[2]
Mobility Concept GmbH[11]	Oberhaching	60.0	60.0	EUR	13,561	5,186
Movie Market Beteiligungs GmbH i. L.	Munich	100.0	100.0	EUR	15	0
NF Objekt FFM GmbH[3]	Munich	100.0	100.0	EUR	125	[2]
NF Objekt München GmbH[3]	Munich	100.0	100.0	EUR	75	[2]
NF Objekte Berlin GmbH[3]	Munich	100.0	100.0	EUR	15,725	[2]
Ocean Breeze Asset GmbH & Co. KG	Bremen	100.0	100.0	EUR	(22)	(12)
Ocean Breeze Energy GmbH & Co. KG[3]	Bremen	100.0	100.0	EUR	(39,072)	19,136
Ocean Breeze GmbH	Bremen	100.0	100.0	EUR	4	(9)

List of Holdings (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	SHARE OF CAPITAL IN % OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
Omnia Grundstücks-GmbH & Co.						
Objekt Eggenfeldener Straße KG[3]	Munich	100.0	100.0	EUR	26	(1)
Omnia Grundstücks-GmbH & Co. Objekt Haidenauplatz KG[3]	Munich	100.0	94.0	EUR	26	(106)
Omnia Grundstücks-GmbH & Co. Objekt Perlach KG[3]	Munich	100.0	100.0	EUR	4,014	449
Orestos Immobilien-Verwaltungs GmbH[3]	Munich	100.0	100.0	EUR	56,674	[2]
Othmarschen Park Hamburg GmbH & Co. Centerpark KG[3]	Munich	100.0	100.0	EUR	(18,942)	
Othmarschen Park Hamburg GmbH & Co. Gewerbepark KG[3]	Munich	100.0	100.0	EUR	(44,083)	
Perikles 20092 Vermögensverwaltung GmbH	Bremen	100.0	100.0	EUR	12	(9)
Portia Grundstücks-Verwaltungsgesellschaft mbH & Co.						
Objekt KG[3]	Munich	100.0	100.0	EUR	500,014	3,811
"Portia" Grundstücksverwaltungs-Gesellschaft						
mit beschränkter Haftung	Munich	100.0	100.0	EUR	31	0
RHOTERRA Gesellschaft für Immobilienverwaltung mbH[3]	Munich	100.0	93.9	EUR	26	[2]
Rolin Grundstücksplanungs- und -verwaltungsgesellschaft mbH	Munich	100.0	100.0	EUR	48	5
Roncasa Immobilien-Verwaltungs GmbH	Munich	100.0	100.0	EUR	(36,170)	950
Salvatorplatz-Grundstücksgesellschaft mbH & Co.						
oHG Saarland[3]	Munich	100.0	100.0	EUR	1,534	928
Salvatorplatz-Grundstücksgesellschaft mbH & Co.						
OHG Verwaltungszentrum[3]	Munich	100.0	100.0	EUR	2,301	(5,449)
Salvatorplatz-Grundstücksgesellschaft mit						
beschränkter Haftung	Munich	100.0	100.0	EUR	711	[2]
Selfoss Beteiligungsgesellschaft mbH[3]	Grünwald	100.0	100.0	EUR	25	[2]
Simon Verwaltungs-Aktiengesellschaft i.L.[4]	Munich	<100,0		EUR	3,045	(24)
Sirius Immobilien- und Projektentwicklungs GmbH	Munich	100.0	100.0	EUR	(143,835)	[2]
Solos Immobilien- und Projektentwicklungs GmbH & Co.						
Sirius Beteiligungs KG[3]	Munich	100.0	100.0	EUR	(31,923)	950
Spree Galerie Hotelbetriebsgesellschaft mbH[3]	Munich	100.0	100.0	EUR	249	[2]
Structured Invest Société Anonyme	Luxembourg	100.0		EUR	7,061	41
T & P Frankfurt Development B.V.	Amsterdam	100.0	100.0	EUR	(7,024)	(19)
T & P Vastgoed Stuttgart B.V.	Amsterdam	87.5	87.5	EUR	(15,494)	(11)
TERRENO Grundstücksverwaltung GmbH & Co.						
Entwicklungs- und Finanzierungsvermittlungs-KG[3]	Munich	75.0	75.0	EUR	(268,579)	
Terronda Development B.V.	Amsterdam	100.0	100.0	EUR	(360)	2
TIVOLI Grundstücks-Aktiengesellschaft[4]	Munich	99.7	99.7	EUR	11,791	4,275
Transterra Gesellschaft für Immobilienverwaltung mbH[3]	Munich	100.0	93.9	EUR	26	[2]
TRICASA Grundbesitz Gesellschaft mbH & Co.						
1. Vermietungs KG[3]	Munich	100.0	100.0	EUR	10,325	791
TRICASA Grundbesitzgesellschaft des bürgerlichen Rechts Nr. 1	Munich	100.0	100.0	EUR	23,601	1,597
Trinitrade Vermögensverwaltungs-Gesellschaft						
mit beschränkter Haftung	Munich	100.0		EUR	233	(583)
UniCredit Beteiligungs GmbH	Munich	100.0		EUR	1,175	[1.9]
UniCredit Capital Markets LLC	New York	100.0	100.0	USD	127,033	7,977
UniCredit (China) Advisory Limited	Beijing	100.0		CNY	210	(1,067)
UniCredit Direct Services GmbH[3]	Munich	100.0		EUR	937	[1.10]
UniCredit Leasing Aviation GmbH	Hamburg	100.0	100.0	EUR	26,693	(395)
UniCredit Leasing GmbH[2, 11]	Hamburg	100.0		EUR	452,026	[1.11]
UniCredit U.S. Finance LLC	Wilmington	100.0		USD	115,432	801
Vermietungsgesellschaft mbH & Co. Objekt MOC KG[3]	Munich	89.3	89.3	EUR	(98,514)	1,802
Verwaltungsgesellschaft Katharinenhof mbH[3]	Munich	100.0		EUR	708	[1.12]
V.M.G. Vermietungsgesellschaft mbH	Munich	100.0	100.0	EUR	26	[2]
Wealth Management Capital Holding GmbH	Munich	100.0		EUR	20,548	[1.13]
WealthCap Aircraft 27 GmbH & Co. KG	Grünwald	100.0	100.0	USD	2	
WealthCap Aircraft 27 Komplementär GmbH	Grünwald	100.0	100.0	EUR	25	0
WealthCap Entity Service GmbH	Munich	100.0	100.0	EUR	570	70
WealthCap Equity GmbH	Munich	100.0	100.0	EUR	3,437	2,937

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
WealthCap Equity Management GmbH	Munich	100.0	100.0	EUR	1,255	1,230
WealthCap Fonds GmbH	Munich	100.0	100.0	EUR	1,042	530
WealthCap Immobilien 1 GmbH & Co. KG	Munich	100.0	100.0	EUR	(371)	(373)
WealthCap Immobilien 2 GmbH & Co. KG	Munich	100.0	100.0	EUR	144	98
WealthCap Immobilienfonds Deutschland 36						
Komplementär GmbH	Grünwald	100.0	100.0	EUR	(309)	(340)
WealthCap Immobilienfonds Deutschland 38						
Komplementär GmbH	Grünwald	100.0	100.0	EUR	16	(72)
WealthCap Initiatoren GmbH	Munich	100.0	100.0	EUR	4,940	3,370
WealthCap Investment Services GmbH	Munich	100.0	90.0	EUR	5,101	[2]
WealthCap Investments, Inc.	Wilmington	100.0	100.0	USD	1,849	485
WealthCap Investorenbetreuung GmbH	Munich	100.0	100.0	EUR	155	[2]
WealthCap Kapitalverwaltungsgesellschaft mbH	Munich	100.0	100.0	EUR	7,099	[2]
WealthCap Leasing GmbH	Grünwald	100.0	100.0	EUR	(145)	(170)
WealthCap Los Gatos 131 Albright Way L.P.	Wilmington	100.0	100.0	USD	(1,693)	(677)
WealthCap Management Services GmbH	Grünwald	100.0	100.0	EUR	3,222	3,186
WealthCap Objekte Südwest GmbH & Co. KG	Munich	100.0	100.0	EUR	(1,180)	(385)
WealthCap Objekt-Vorrat 20 GmbH & Co. KG	Munich	100.0	100.0	EUR	772	760
WealthCap Objekt-Vorrat 21 GmbH & Co. KG	Munich	100.0	100.0	EUR	30	20
WealthCap PEIA Komplementär GmbH	Grünwald	100.0	100.0	EUR	57	3
WealthCap PEIA Management GmbH	Munich	100.0	94.0	EUR	2,381	1,141
WealthCap Portland Park Square, L.P.	Wilmington	100.0	100.0	USD	(827)	(665)
WealthCap Real Estate Management GmbH	Munich	100.0	100.0	EUR	108	[2]
WealthCap Stiftungstreuhand GmbH	Munich	100.0	100.0	EUR	43	2
WealthCap USA Immobilien Verwaltungs GmbH	Munich	100.0	100.0	EUR	223	173
WealthCap Vorrats-2 GmbH	Grünwald	100.0	100.0	EUR	25	(8)
1.1.2 Non-consolidated subsidiaries[5]						
Acis Immobilien- und Projektentwicklungs GmbH	Grünwald	100.0	100.0	EUR	25	[2]
AGRUND Grundstücks-GmbH	Munich	90.0	90.0			
Alexandersson Real Estate I B.V.	Apeldoorn	100.0	100.0			
"Alte Schmelze" Projektentwicklungsgesellschaft mbH	Munich	100.0	100.0			
Altea Verwaltungsgesellschaft mbH & Co. Objekt I KG	Munich	100.0	100.0			
AMMS Ersatz-Komplementär GmbH	Ebersberg	100.0	100.0			
AMMS Komplementär GmbH i.L.	Ebersberg	98.8	98.8			
ANWA Gesellschaft für Anlagenverwaltung mbH	Munich	95.0	93.9			
Apir Verwaltungsgesellschaft mbH & Co.						
Immobilien- und Vermietungs KG	Munich	100.0	100.0	EUR	(33,657)	950
Arena Stadion Beteiligungsverwaltungs-GmbH	Munich	100.0				
A&T-Projektentwicklungs-Verwaltungs GmbH	Munich	100.0	100.0			
BIL Aircraftleasing GmbH	Grünwald	100.0	100.0			
BIL Immobilien Fonds GmbH	Munich	100.0	100.0			
BIL Leasing GmbH & Co Hotel Rostock KG i.L.	Rostock	58.9	58.9			
Blue Capital Metro Amerika Inc.	Wilmington	100.0	100.0			
BV Grundstücksentwicklungs-GmbH & Co.						
Schloßberg-Projektentwicklungs-KG	Munich	100.0	100.0			
Deltaterra Gesellschaft für Immobilienverwaltung mbH	Munich	100.0	93.9	EUR	26	[2]
GCCS Golfanlagen Errichtungs- und Verwaltungs GmbH	Munich	100.0	100.0	EUR	26	[2]
Großkugel Immobilien- und Projektentwicklungs GmbH	Munich	100.0	100.0	EUR	(3,354)	[2]
H.F.S. Immobilienfonds Deutschland 1 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 3 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 4 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 6 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 7 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 8 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 9 Komplementär GmbH	Grünwald	100.0	100.0			

List of Holdings (Continued)

		SHARE OF CAPITAL IN %			EQUITY CAPITAL	NET PROFIT
NAME	REGISTERED OFFICE	TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	in thousands of currency units	in thousands of currency units
H.F.S. Immobilienfonds Deutschland 10 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 11 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 12 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 15 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 16 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 18 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds Deutschland 19 GmbH & Co. KG	Munich	100.0	100.0			
H.F.S. Immobilienfonds Europa 2 Beteiligungs GmbH	Munich	100.0	100.0			
H.F.S. Immobilienfonds Europa 3 Beteiligungs B.V.	The Hague	100.0	100.0			
H.F.S. Immobilienfonds Europa 3 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Immobilienfonds GmbH & Co. Europa 4 KG	Munich	100.0	100.0			
H.F.S. Leasingfonds Deutschland 1 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Leasingfonds Deutschland 7 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Value Management GmbH	Munich	100.0	100.0			
H.F.S. Zweitmarktfonds Deutschland 1 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Zweitmarktfonds Deutschland 2 Komplementär GmbH	Grünwald	100.0	100.0			
H.F.S. Zweitmarktfonds Deutschland 3 GmbH & Co. KG	Munich	100.0	100.0			
H.F.S. Zweitmarktfonds Deutschland 4 GmbH & Co. KG	Munich	100.0	100.0			
Hofgarten Real Estate B.V. (share of voting rights: 50.5%)	Amsterdam	47.2	47.2	EUR	(49,346)	(25)
HVB Services South Africa (Proprietary) Limited	Johannesburg	100.0				
HVBFF Kapitalvermittlungs GmbH	Munich	100.0	100.0	EUR	19	2
HVBFF Leasing & Investition GmbH & Co Erste KG	Munich	100.0	100.0			
HVBFF Leasing Objekt GmbH	Grünwald	100.0	100.0			
HVBFF Leasing-Fonds Verwaltungs GmbH	Munich	100.0	100.0			
HVBFF Produktionshalle GmbH i.L.	Munich	100.0	100.0			
HVZ GmbH & Co. Objekt Unterföhring KG	Munich	100.0	100.0			
HYPO-REAL Haus- und Grundbesitz Gesellschaft mbH	Munich	100.0	100.0	EUR	128	2
Landos Immobilien- und Projektentwicklungs GmbH	Munich	100.0	100.0			
Life Britannia GP Limited	Edgware	100.0	100.0			
Life Britannia Management GmbH	Grünwald	100.0	100.0			
Life Verwaltungs Erste GmbH	Munich	100.0	100.0			
Life Verwaltungs Zweite GmbH	Grünwald	100.0	100.0			
Motion Picture Production GmbH	Grünwald	51.2	51.2			
Omnia Grundstücks-GmbH	Munich	100.0	100.0	EUR	26	2
Omnia Grundstücks-GmbH & Co. Betriebs KG	Munich	100.0	94.0			
Othmarschen Park Hamburg Wohn- und Gewerbepark GmbH	Munich	100.0	100.0	EUR	102	2
Perterra Gesellschaft für Immobilienverwaltung mbH	Munich	100.0	100.0	EUR	26	2
Projekt-GbR Kronstadter Straße München	Munich	75.0	75.0			
Quinterra Gesellschaft für Immobilienverwaltung mbH	Munich	100.0	100.0	EUR	26	2
Redstone Mortgages Limited	London	100.0		GBP	52,580	665
Saphira Immobilien- und Projektentwicklungs GmbH & Co. Frankfurt City West Office Center und Wohnbau KG	Munich	100.0	100.0			
Schloßberg-Projektentwicklungs- GmbH & Co 683 KG	Munich	100.0	100.0			
TERRENO Grundstücksverwaltung GmbH	Munich	75.0	75.0			
TERRENO Grundstücksverwaltung GmbH & Co. Objektgesellschaft Grillparzerstraße KG	Munich	75.0		EUR	(3,002)	0
Tishman Speyer Berlin Friedrichstraße KG i.L. (share of voting rights: 96.6%, of which 7.1% held indirectly)	Munich	97.1	5.9			
UniCredit CAIB Securities UK Ltd.	London	100.0				
VCI Volta Center Immobilienverwaltungs GmbH	Munich	100.0	100.0	EUR	(22,047)	950
VereinWest Overseas Finance (Jersey) Limited	St. Helier	100.0				
WealthCap Canadian Management Inc.	Toronto	100.0	100.0			
WealthCap Dritte Europa Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Equity Sekundär GmbH	Munich	100.0	100.0			
WealthCap Erste Kanada Immobilien Verwaltung GmbH	Munich	100.0	100.0			

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
WealthCap Europa Erste Immobilien –						
Objekt Niederlande – Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Europa Immobilien Fünfte Objekte						
Österreich Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Europa Immobilien Siebte Objekte						
Österreich Komplementär GmbH	Munich	100.0	100.0			
WealthCap Europa Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Fondsportfolio Private Equity 21 GmbH & Co.						
geschlossene Investment KG	Grünwald	100.0	100.0			
WealthCap Fondsportfolio Private Equity 22 GmbH & Co.						
geschlossene Investment KG	Grünwald	100.0	100.0			
WealthCap Immobilien Deutschland 39 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Immobilien Deutschland 40 GmbH & Co.						
geschlossene Investment KG	Munich	100.0	100.0			
WealthCap Immobilien Deutschland 41 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Immobilien Nordamerika 16 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Immobilien Nordamerika 17 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Immobilien Services GmbH	Munich	100.0	100.0			
WealthCap Immobilien und Verwaltung Sekundär GmbH	Munich	100.0	100.0			
WealthCap Immobilien 40 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Immobilien 41 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Immobilienfonds Deutschland 36 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Immobilienfonds Deutschland 37 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Los Gatos 121 Albright Way GP, Inc.	Wilmington	100.0	100.0			
WealthCap Los Gatos 131 Albright Way GP, Inc.	Wilmington	100.0	100.0	USD	(2,037)	(793)
WealthCap Management, Inc.	Wilmington	100.0	100.0			
WealthCap Mountain View GP, Inc.	Georgia	100.0	100.0			
WealthCap Objekt Bogenhausen GmbH & Co. KG	Grünwald	94.9	94.9	EUR	5,900	(2,894)
WealthCap Objekt-Vorrat 9 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Objekt-Vorrat 13 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 15 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 16 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 17 GmbH & Co. KG	Munich	100.0	100.0			
WealthCap Objekt-Vorrat 20 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Objekt-Vorrat 21 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Portfolio 3 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Portland Park Square GP Inc.	Atlanta	100.0	100.0			
WealthCap Private Equity GmbH	Munich	100.0	100.0			
WealthCap Private Equity Sekundär GmbH	Munich	100.0	100.0			
WealthCap Private Equity 19 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity 20 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity 21 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Private Equity 22 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Real Estate GmbH	Munich	100.0	100.0			
WealthCap Real Estate Komplementär GmbH	Munich	100.0	100.0			
WealthCap Real Estate Sekundär GmbH	Munich	100.0	100.0			
WealthCap SachWerte Portfolio 2 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Spezial 3 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Spezial 4 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Spezial 5 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Spezial 6 Komplementär GmbH	Grünwald	100.0	100.0			
WealthCap Spezial-AIF 1 Komplementär GmbH	Munich	100.0	100.0			
WealthCap Spezial-AIF 4 GmbH & Co.						
geschlossene Investment KG	Munich	100.0	100.0			
WealthCap Spezial-AIF 6 GmbH & Co. KG	Munich	100.0	100.0			

List of Holdings (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	SHARE OF CAPITAL IN % OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
WealthCap Vorrats-1 GmbH	Grünwald	100.0	100.0			
WealthCap Zweite Europa Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap Zweite USA Immobilien Verwaltungs GmbH	Munich	100.0	100.0			
WealthCap ZweitmarktWerte Immobilien 4 Komplementär GmbH	Munich	100.0	100.0			
WealthCap ZweitmarktWerte 5 GP S.à r.l.	Senningerberg	100.0	100.0			
WealthCap 21/22 Equity GmbH & Co. KG						
(share of voting rights: 100%)	Grünwald	—	—			
WealthCap 39 Komplementär GmbH	Grünwald	100.0	100.0			

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN %	CURRENCY	SUBSCRIBED CAPITAL in thousands of currency units
1.2 Fully consolidated structured entities				
with or without shareholding				
Altus Alpha Plc	Dublin	0	EUR	40
Arabella Finance DAC	Dublin	0	EUR	<1
BARD Engineering GmbH	Emden	0	EUR	100
BARD Holding GmbH	Emden	0	EUR	25
Buitengaats Holding B.V.	Eemshaven	0	EUR	18
Cuxhaven Steel Construction GmbH	Cuxhaven	0	EUR	25
Elektra Purchase No. 28 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 31 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 32 S.A.	Luxembourg	0	EUR	31
Elektra Purchase No. 32 S.A. – Compartment 2	Luxembourg	0	EUR	<1
Elektra Purchase No. 33 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 34 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 35 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 36 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 37 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 38 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 39 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 40 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 41 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 42 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 43 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 44 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 46 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 47 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 48 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 54 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 55 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 57 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 58 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 718 DAC	Dublin	0	EUR	<1
Elektra Purchase No. 911 Ltd.	St. Helier	0	EUR	<1
European-Office-Fonds	Munich	0	EUR	0
GELDILUX-TS-2013 S.A.	Luxembourg	0	EUR	31
GELDILUX-TS-2015 S.A.	Luxembourg	0	EUR	31
GEMMA Verwaltungsgesellschaft mbH & Co.				
Vermietungs KG (held indirectly)	Pullach	6.1	EUR	68,272
H.F.S. Leasingfonds Deutschland 7 GmbH & Co. KG				
(held indirectly)	Munich	<0.1	EUR	56,605
HVB Funding Trust	Wilmington	0	USD	0
HVB Funding Trust III	Wilmington	0	USD	0

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN %	CURRENCY	SUBSCRIBED CAPITAL in thousands of currency units
MOC Verwaltungs GmbH & Co.				
Immobilien KG (held indirectly)[4, 6]	Munich	23.0	EUR	5,113
Ocean Breeze Finance S.A. – Compartment 1	Luxembourg	0	EUR	0
Rosenkavalier 2008 GmbH	Frankfurt am Main	0	EUR	25
Rosenkavalier 2015 UG	Frankfurt am Main	0	EUR	8

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN %		CURRENCY	EQUITY CAPITAL	NET PROFIT
		TOTAL	OF WHICH HELD INDIRECTLY		in thousands of currency units	in thousands of currency units
2 Joint ventures						
Minor joint ventures[5]						
Heizkraftwerk Cottbus Verwaltungs GmbH i.L.	Cottbus	33.3		EUR	354	245
Heizkraftwerke-Pool Verwaltungs-GmbH	Munich	33.3		EUR	119	863
MoneyMap GmbH	Berlin	46.4		EUR	825	(1,380)
WealthCap Portfolio Finanzierungs-GmbH & Co. KG						
(share of voting rights: 50.0%)	Grünwald	—		EUR	71,453	2,238
3 Associated companies						
3.1 Associated companies valued at equity						
Adler Funding LLC[4]	Dover	32.8		USD	13,032	2,442
Comtrade Group B.V.[4, 11]	Rotterdam	21.1	21.1	EUR	48,679	12,808
Nautilus Tankers Limited[4]	Valletta	45.0	45.0	USD	35,943	7,547
paydirekt Beteiligungsgesellschaft privater Banken mbH	Berlin	24.0		EUR	6,112	3
SwanCap Partners GmbH (share of voting rights: 49.0%)[4]	Munich	75.3		EUR	6,041	153
3.2 Minor associated companies[5]						
BioM Venture Capital GmbH & Co. Fonds KG						
(share of voting rights: 20.4%)	Planegg	23.5				
MOC Verwaltungs GmbH	Munich	23.0	23.0			
4 Further Holdings according to						
Section 271 (1) HGB[5]						
4.1 Banks and financial institutions						
AKA Ausfuhrkredit-Gesellschaft mbH	Frankfurt am Main	15.4		EUR	231,752	22,885
BBB Bürgschaftsbank zu Berlin-Brandenburg GmbH	Berlin	4.3		EUR	11,249	450
BGG Bayerische Garantiegesellschaft mbH						
für mittelständische Beteiligungen	Munich	10.5		EUR	48,737	2,360
Bürgschaftsbank Brandenburg GmbH	Potsdam	7.8		EUR	27,601	1,273
Bürgschaftsbank Mecklenburg-Vorpommern GmbH	Schwerin	9.1		EUR	16,350	201
Bürgschaftsbank Nordrhein-Westfalen GmbH						
– Kreditgarantiegemeinschaft –	Düsseldorf	0.6		EUR	34,158	1,114
Bürgschaftsbank Rheinland-Pfalz GmbH	Mainz	1.4		EUR	16,525	145
Bürgschaftsbank Saarland Gesellschaft mit beschränkter						
Haftung, Kreditgarantiegemeinschaft für den Handel,						
Handwerk und Gewerbe	Saarbrücken	1.3		EUR	4,295	43
Bürgschaftsbank Sachsen-Anhalt GmbH	Magdeburg	8.9		EUR	15,158	209
Bürgschaftsbank Sachsen GmbH (share voting rights: 5.4%)	Dresden	4.7		EUR	40,370	2,220
Bürgschaftsbank Schleswig-Holstein GmbH	Kiel	5.4		EUR	39,211	564
Bürgschaftsbank Thüringen GmbH	Erfurt	8.7		EUR	25,304	700
Bürgschaftsgemeinschaft Hamburg GmbH	Hamburg	10.5		EUR	24,499	535
MCB Bank Limited	Lahore	>0.0		PKR	138,105,686	19,138,491

List of Holdings (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
Niedersächsische Bürgschaftsbank GmbH	Hanover	3.0		EUR	24,464	1,273
Saarländische Investitionskreditbank AG	Saarbrücken	3.3		EUR	64,680	866
solarisBank AG	Berlin	11.8		EUR	5,675	(7,588)
4.2 Other companies						
Acton GmbH & Co. Heureka II KG	Munich	8.9		EUR	53,120	(895)
Amstar Liquidating Trust (share voting rights: 0.0%)	New York	>0.0	>0.0			
Babcock & Brown Limited	Sydney	3.2				
BayBG Bayerische Beteiligungsgesellschaft mbH[7]	Munich	22.5		EUR	226,714	12,688
Bayerischer BankenFonds GbR[7]	Munich	25.6				
BCV Investment SCA (share voting rights: 0.0%)	Luxembourg	1.1	1.1	EUR	603	230
BGN GmbH & Co. KG	Wiesbaden	6.0	6.0			
BIL Leasing-Fonds GmbH & Co. Altstadtsanierung Freiberg KG						
(share voting rights: 0.3%)	Grünwald	—	—	EUR	459	886
BIL Leasing-Fonds GmbH & Co. Bankgebäude Leipzig KG						
(share voting rights: 0.3%)	Grünwald	—	—	EUR	(597)	720
BIL Leasing-Fonds GmbH & Co HONOR KG i.L.						
(share voting rights: 0.1%)	Grünwald	—	—			
Bil Leasing-Fonds GmbH & Co Objekt Verwaltungssitz						
Bankenverband KG (share voting rights: 0.2%)	Grünwald	—	—	EUR	824	1,184
BIL Leasing-Fonds GmbH & Co. Stadtsanierung Freiberg KG						
(share voting rights: 0.2%)	Grünwald	—	—	EUR	2,005	6,829
BIL Leasing GmbH & Co Objekte Freiberg KG	Grünwald	6.0	6.0			
BIL Leasing GmbH & Co Objekt Verwaltungsgebäude Halle KG						
(share voting rights: 0.1%)	Grünwald	—	—			
BioM Aktiengesellschaft Munich Bio Tech Development	Planegg	8.5		EUR	2,198	(54)
Blue Capital Equity I GmbH & Co.KG i.L.	Munich	>0.0	>0.0			
Blue Capital Equity II GmbH & Co. KG i.L.	Munich	>0.0	>0.0	EUR	1,811	(45)
Blue Capital Equity III GmbH & Co. KG						
(share voting rights: >0.0%)	Munich	0.8	0.8	EUR	8,800	(589)
Blue Capital Equity IV GmbH & Co. KG	Munich	>0.0	>0.0	EUR	15,576	275
Blue Capital Equity V GmbH & Co. KG						
(share voting rights: >0.0%)	Munich	0.1	0.1	USD	4,135	134
Blue Capital Equity VI GmbH & Co. KG	Munich	>0.0	>0.0	USD	23,300	1,997
Blue Capital Equity VII GmbH & Co. KG	Munich	>0.0	>0.0	USD	18,831	2,834
Blue Capital Equity VIII GmbH & Co. KG						
(share voting rights: 0.0%)	Munich	0.7	0.7	EUR	20,232	420
Blue Capital Equity IX GmbH & Co. KG						
(share voting rights: 0.6%)	Munich	0.7	0.7	EUR	9,515	414
Blue Capital Europa Immobilien GmbH & Co.						
Fünfte Objekte Österreich KG	Munich	0.1	0.1	EUR	15,149	343
Blue Capital Europa Immobilien GmbH & Co.						
Sechste Objekte Großbritannien KG i.L.	Munich	>0.0	>0.0	EUR	1,500	(3,506)
Blue Capital Europa Immobilien GmbH & Co.						
Siebte Objekte Österreich KG	Munich	0.1	0.1	EUR	24,360	2,237
Blue Capital Metro Amerika Fund, L.P.	Wilmington	0.1	0.1	USD	164,923	(2,524)
Blue Capital Metropolitan Amerika GmbH & Co. KG	Munich	0.1	0.1	USD	120,502	6,755
Boston Capital Partners V, L.L.C.	Wilmington	10.0	10.0			
Boston Capital Ventures V, L.P. (share voting rights: 0.0%)	Wilmington	20.0		USD	13,201	6
BTG Beteiligungsgesellschaft Hamburg mbH	Hamburg	13.6		EUR	4,158	584
BV Capital GmbH & Co. Beteiligungs KG Nr. 1	Hamburg	16.8	16.8	EUR	2,094	237
Carlyle Partners V, L.P. (share voting rights: 0.0%)	Wilmington	>0.0	>0.0	USD	4,668,584	666,851
Carlyle U.S. Equity Opportunity Fund, L.P.						
(share voting rights: 0.0%)	Wilmington	0.9	0.9	USD	992,567	(65,725)
Charme II (share voting rights: 0.0%)	Milan	7.7		EUR	8,651	6,866

		SHARE OF CAPITAL IN %			EQUITY CAPITAL	NET PROFIT
NAME	REGISTERED OFFICE	TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	in thousands of currency units	in thousands of currency units
CHARME INVESTMENTS S.C.A. (share voting rightsl: 12.1%)	Luxembourg	13.4		EUR	22,770	697
China International Packaging Leasing Co., Ltd.	Beijing	17.5		CNY	(101,056)	553
China Investment Incorporations (BVI) Ltd.	Tortola	10.8	10.8	USD	48,485	4,570
Circle 1 Luxembourg Holdings S.C.A.	Luxembourg	0.6	0.6			
CLS Group Holdings AG	Zurich	1.2		GBP	369,636	32,345
CMC-Hertz Partners, L.P. (share voting rights: 0.0%)	Wilmington	7.1	7.1			
CME Group Inc.	Wilmington	>0.0		USD	20,340,700	1,534,100
Earlybird GmbH & Co. Beteiligungskommanditgesellschaft III i.L.	Munich	9.7	9.7	USD	7,385	4,673
Easdaq NV	Leuven	>0.0		EUR	1,867	2,604
East Capital Financials Fund AB (share voting rights: 0.0%)	Stockholm	0.2		EUR	25,225	(11,047)
EDD AG (share voting rights: 3.1%)	Düsseldorf	3.0		EUR	32,245	(542)
Einkaufsgalerie Roter Turm Beteiligungs GmbH & Co. KG	Munich	>0.0	>0.0	EUR	7,926	310
Einkaufsgalerie Roter Turm Chemnitz GmbH & Co. KG	Munich	>0.0	>0.0	EUR	54,969	1,116
EURO Kartensysteme GmbH	Frankfurt am Main	6.0		EUR	11,635	173
FBEM Gesellschaft mit beschränkter Haftung i. L.	Berlin	3.0		EUR	271	2,740
Film & Entertainment VIP Medienfonds 4 GmbH & Co. KG	Grünwald	9.3	9.3	EUR	24,939	(1,426)
FinLeap GmbH[8]	Berlin	3.6		EUR	21,935	(6,878)
Gut Waldhof GmbH & Co. Golfplatz Betriebs KG	Hamburg	0.7				
H.F.S. Immobilienfonds Bahnhofspassagen						
Potsdam GmbH & Co. KG	Munich	5.9	5.9	EUR	23,183	(397)
H.F.S. Immobilienfonds "Das Schloss"						
Berlin-Steglitz GmbH & Co. KG	Munich	6.0	6.0	EUR	26,861	776
H.F.S. Immobilienfonds Deutschland 1 GmbH & Co. KG	Munich	0.6	0.6	EUR	841	184
H.F.S. Immobilienfonds Deutschland 3 GmbH & Co. KG	Munich	0.2	0.2	EUR	1,903	935
H.F.S. Immobilienfonds Deutschland 4 GmbH & Co. KG	Munich	0.2	0.2	EUR	(2,487)	(962)
H.F.S. Immobilienfonds Deutschland 6 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	16,291	8,498
H.F.S. Immobilienfonds Deutschland 7 GmbH & Co. KG	Munich	0.1	0.1	EUR	7,034	1,549
H.F.S. Immobilienfonds Deutschland 8 GmbH & Co. KG	Munich	0.1	0.1	EUR	11,886	614
H.F.S. Immobilienfonds Deutschland 9 GmbH & Co. KG	Munich	0.1	0.1	EUR	6,619	410
H.F.S. Immobilienfonds Deutschland 10 GmbH & Co. KG	Munich	1.4	1.4	EUR	133,077	5,712
H.F.S. Immobilienfonds Deutschland 12 GmbH & Co. KG	Munich	3.9	3.9	EUR	80,655	11,511
H.F.S. Immobilienfonds Deutschland 15 GmbH & Co. KG	Munich	0.1	0.1	EUR	18,666	(36)
H.F.S. Immobilienfonds Deutschland 16 GmbH & Co. KG	Munich	0.1	0.1	EUR	61,584	1,367
H.F.S. Immobilienfonds Deutschland 18 GmbH & Co. KG i. L.	Munich	6.1	6.1	EUR	10,773	47,377
H.F.S. Immobilienfonds GmbH & Co. Europa 3 KG	Munich	0.1	0.1	EUR	13,161	(3,765)
H.F.S. Immobilienfonds Köln GmbH & Co. KG	Munich	>0.0	>0.0	EUR	67,570	359
H.F.S. Immobilienfonds Köln Supplier-Park GmbH & Co. KG	Munich	>0.0	>0.0	EUR	24,307	2,732
H.F.S. Immobilienfonds Schweinfurt GmbH & Co. KG	Munich	>0.0	>0.0	EUR	7,246	307
H.F.S. Zweitmarktfonds Deutschland 1 GmbH & Co. KG	Ebersberg	0.1	0.1	EUR	14,831	2,696
H.F.S. Zweitmarktfonds Deutschland 2 GmbH & Co. KG	Ebersberg	>0.0	>0.0	EUR	86,863	11,978
HVBFF Immobilien-Fonds GmbH & Co Wohnungen Leipzig KG i.L.						
(share voting rights: 1.0%)	Munich	—	—	EUR	557	376
HVBFF Life Britannia GmbH & Co Erste KG	Grünwald	>0.0	>0.0	EUR	22,139	5,398
HVB Trust Pensionsfonds AG (share voting rights: 0.0%)[8]	Munich	100.0				
IGEPA Gewerbepark GmbH & Co Vermietungs KG	Fürstenfeldbruck	2.0	2.0	EUR	(9,704)	9,650
Industriepalast in Leipzig Verwaltungs-GmbH & Co. KG i.L.						
(share voting rights: 6.3%)	Berlin	6.2				
Interbanking Systems S.A. (Dias S.A.)	Maroussi	0.9		EUR	26,734	
IPE Tank and Rail Investment 1 S.C.A.	Luxembourg	7.8	7.8			
JBG/BC Investor, L.P.	Chevy Chase	0.5	0.5	USD	85,812	6,172
Kepler Cheuvreux S.A. (share voting rights: 4.6%)	Paris	5.2		EUR	63,061	7,080
Kreditgarantiegemeinschaft der freien Berufe						
Baden-Württemberg Verwaltungs-GmbH	Stuttgart	1.3				

List of Holdings (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
Kreditgarantiegemeinschaft der Industrie,						
des Verkehrsgewerbes und des Gastgewerbes						
Baden-Württemberg Verwaltungs-GmbH	Stuttgart	2.6				
Kreditgarantiegemeinschaft des bayerischen Gartenbaues GmbH	Munich	8.1				
Kreditgarantiegemeinschaft des bayerischen Handwerks GmbH	Munich	7.2		EUR	4,846	
Kreditgarantiegemeinschaft des Handels Baden-Württemberg						
Verwaltungs-GmbH	Stuttgart	2.3		EUR	1,022	
Kreditgarantiegemeinschaft des Handwerks						
Baden-Württemberg Verwaltungsgesellschaft mbH	Stuttgart	2.5		EUR	1,001	
Kreditgarantiegemeinschaft des Hotel- und						
Gaststättengewerbes in Bayern GmbH	Munich	9.7		EUR	4,359	
Kreditgarantiegemeinschaft für den Handel in Bayern GmbH	Munich	2.2		EUR	6,317	
Kreditgarantiegemeinschaft in Baden-Württemberg						
Verwaltungs-GmbH	Stuttgart	5.1		EUR	1,023	
Life Britannia First LP (share voting rights: 1.0%)	Uxbridge	—	—	GBP	17,699	429
Life Britannia Second LP (share voting rights: 1.0%)	Uxbridge	—	—	GBP	17,699	355
Life GmbH & Co Erste KG	Munich	>0.0	>0.0	USD	104,623	(17,436)
Life GmbH & Co. Zweite KG (share voting rights: 0.1%)	Grünwald	>0.0	>0.0	USD	87,882	(3,738)
Lion Capital Fund I, L.P. (share voting rights: 0.0%)	London	0.9		EUR	2,429	(410)
Liquiditäts-Konsortialbank GmbH i.L.	Frankfurt am Main	5.7		EUR	230,536	(5,996)
Martin Schmälzle Grundstücksgesellschaft						
Objekt Wolfsburg GmbH & Co. KG	Munich	>0.0	>0.0	EUR	15,692	868
MBG Mittelständische Beteiligungsgesellschaft						
Baden-Württemberg GmbH	Stuttgart	5.0		EUR	66,948	6,067
MBG Mittelständische Beteiligungsgesellschaft						
Rheinland-Pfalz mbH (share voting rights: 11.1%)	Mainz	9.8		EUR	13,548	1,172
MBG Mittelständische Beteiligungsgesellschaft						
Schleswig-Holstein mbH	Kiel	3.6		EUR	36,042	2,604
MFG Flughafen-Grundstücksverwaltungs-						
gesellschaft mbH & Co Beta KG i.L.	Grünwald	10.6				
Mittelständische Beteiligungsgesellschaft						
Berlin-Brandenburg GmbH	Potsdam	11.6		EUR	18,278	1,956
Mittelständische Beteiligungsgesellschaft						
Mecklenburg-Vorpommern mbH	Schwerin	15.4		EUR	14,141	655
Mittelständische Beteiligungsgesellschaft						
Niedersachsen (MBG) mbH	Hanover	8.2		EUR	13,131	895
Mittelständische Beteiligungsgesellschaft						
Sachsen-Anhalt mit beschränkter Haftung	Magdeburg	12.7		EUR	22,870	153
Mittelständische Beteiligungsgesellschaft Sachsen mbH	Dresden	11.8		EUR	44,729	2,464
Mittelständische Beteiligungsgesellschaft						
Thüringen mbH	Erfurt	13.4		EUR	23,730	1,214
Motion Picture Production GmbH & Co. Erste KG						
(share voting rights: 0.1%)	Grünwald	>0.0	>0.0	EUR	(28,103)	1,461
Mühoga Münchner Hochgaragen Gesellschaft						
mit beschränkter Haftung[7]	Munich	25.0	25.0	EUR	4,473	2,050
Natural Stone Investments S.A.	Luxembourg	7.4	7.4	EUR	(175,926)	(14,052)
Neumayer Tekfor Verwaltungs GmbH i.L.						
(share voting rights: 0.0%)	Offenburg	4.0	4.0			
Osca Grundstücksverwaltungsgesellschaft mbH & Co. KG i.L.	Grünwald	18.0				
PAI Europe VII-1 Global S.L.P.	Paris	0.5	0.5			
PICIC Insurance Ltd.	Karachi	>0.0		PKR	38,211	(311,789)
PRINCIPIA FUND (share voting rights: 0.0%)	Milan	10.0				
ProAreal GmbH i. I.	Wiesbaden	10.0		EUR	(93,513)	(26)
REF IV Associates (Caymans) L.P. Acqua CIV S.C.S.						
(share voting rights: 0.0%)	Luxembourg	38.3	38.3			

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
Rocket Internet Capital Partners (Euro) SCS (share voting rights: 0.0%)	Luxembourg	4.4		EUR	37,806	5,002
Roomstore Inc.	Richmond	7.7	7.7			
Saarländische Kapitalbeteiligungsgesellschaft mit beschränkter Haftung (share voting rights: 8.8%)	Saarbrücken	8.7		EUR	7,475	35
Social Venture Fund GmbH & Co. KG (share voting rights: 0.0%)	Munich	9.6		EUR	3,308	(264)
Social Venture Fund II GmbH & Co. KG (share voting rights: 0.0%)	Munich	4.5		EUR	6,179	(2,362)
Stahl Group S.A.	Luxembourg	0.5	0.5	EUR	651,494	914,893
SwanCap FLP II SCSp (share voting rights: 37.5%)[9]	Senningerberg	—				
SwanCap FLP SCS (Stimmrechtsanteil: 37,5%)[9]	Senningerberg	—				
SwanCap TB II SCSp (share voting rights: 0.0%)[10]	Senningerberg	>0.0				
SwanCap Blocker GmbH & Co. KG[10]	Munich	—				
S.W.I.F.T., (Co-operative 'Society for Worldwide Interbank Financial Telecommunication')	Brussels	0.3		EUR	415,332	26,219
Texas Energy Future Holdings L.P. (share voting rights: 0.0%)	Fort Worth	1.5	1.5	USD	2,003	(172)
True Sale International GmbH	Frankfurt am Main	7.7		EUR	4,809	46
UniCredit Business Integrated Solutions Società Consortile per Azioni	Milan	>0.0		EUR	332,921	2,572
VISA Inc. (share voting rights: 0.0%)	Wilmington	>0.0		USD	32,912,000	5,991,000
VV Immobilien GmbH & Co. United States KG i.L. (share voting rights: 9.2%)	Munich	9.3				
VV Immobilien GmbH & Co. US City KG i.L.	Munich	0.9				
WealthCap Aircraft 1 GmbH & Co. KG	Munich	>0.0	>0.0	USD	22,461	344
WealthCap Aircraft 25 GmbH & Co. KG	Grünwald	>0.0	>0.0	USD	45,046	(835)
WealthCap Aircraft 26 GmbH & Co. KG	Grünwald	>0.0	>0.0	USD	57,251	(576)
WealthCap Immobilien Deutschland 38 GmbH & Co. geschlossene Investment KG	Munich	>0.0	>0.0	EUR	89,704	6,513
WealthCap Immobilien Deutschland 39 GmbH & Co. geschlossene Investment KG	Munich	>0.0	>0.0	EUR	1,070	(498)
WealthCap Immobilienfonds Deutschland 30 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	44,276	6,171
WealthCap Immobilienfonds Deutschland 31 GmbH & Co. KG (share voting rights: 0.1%)	Munich	>0.0	>0.0	EUR	35,062	1,514
WealthCap Immobilienfonds Deutschland 32 GmbH & Co. KG (share voting rights: 0.1%)	Munich	>0.0	>0.0	EUR	50,741	2,092
WealthCap Immobilienfonds Deutschland 33 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	59,900	2,516
WealthCap Immobilienfonds Deutschland 34 GmbH & Co. KG (share voting rights: 0.1%)	Munich	>0.0	>0.0	EUR	39,681	2,545
WealthCap Immobilienfonds Deutschland 35 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	124,993	7,463
WealthCap Immobilienfonds Deutschland 37 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	64,359	2,455
WealthCap Immobilienfonds Donauwörth 1 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	21,571	1,592
WealthCap Immobilienfonds Donauwörth 2 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	5,498	595
WealthCap Immobilien Nordamerika 16 GmbH & Co. geschlossene Investment KG	Munich	>0.0	>0.0	USD	36,431	18
WealthCap Immobilien Nordamerika 17 GmbH & Co. geschlossene Investment KG	Munich	>0.0	>0.0	USD	14,639	5,689
WealthCap Infrastructure Fund I GmbH & Co. KG	Munich	>0.0	>0.0	EUR	4,997	3,386
WealthCap Infrastruktur Amerika GmbH & Co. KG (share voting rights: 0.1%)	Grünwald	>0.0	>0.0	USD	4,995	(52)
WealthCap Leasing 1 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	31,529	1,576
WealthCap Leasing 2 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	30,985	1,471
WealthCap Leasing 3 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	30,223	1,453
WealthCap Leasing 4 GmbH & Co. KG	Grünwald	5.5	5.5	EUR	29,153	1,233

List of Holdings (Continued)

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
WealthCap LebensWert 1 GmbH & Co. KG						
share voting rights: 0.3%)	Grünwald	>0.0	>0.0	USD	2,277	844
WealthCap LebensWert 2. GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0.0	>0.0	USD	8,792	760
WealthCap Life Britannia 2. GmbH & Co KG	Munich	>0.0	>0.0	EUR	21,433	1,428
WealthCap Life USA 4. GmbH & Co. KG	Grünwald	>0.0	>0.0	USD	76,013	8,495
WealthCap Los Gatos 121 Albright Way L.P.	Wilmington	>0.0	>0.0	USD	63,881	7,471
WealthCap Mountain View I L.P. (share voting rights: 0.1%)	Georgia	—	—	USD	40,063	5,070
WealthCap Objekt Berg-am-Laim GmbH & Co. KG	Munich	5.2	5.2	EUR	121,259	8,143
WealthCap Objekt Essen GmbH & Co. KG	Munich	5.2	5.2	EUR	30,877	(376)
WealthCap Objekt Frankfurt GmbH & Co. KG	Munich	5.2	5.2	EUR	(426)	(218)
WealthCap Objekt Hackerbrücke GmbH & Co. KG	Munich	5.2	5.2	EUR	33,358	1,253
WealthCap Objekt Hannover Ia GmbH & Co. KG	Munich	5.2	5.2	EUR	17,169	229
WealthCap Objekt Hannover Ib GmbH & Co. KG	Munich	5.2	5.2	EUR	3,885	450
WealthCap Objekt Hannover II GmbH & Co. KG	Munich	5.2	5.2	EUR	17,955	86
WealthCap Objekt Hufelandstraße GmbH & Co. KG	Munich	5.2	5.2	EUR	11,748	851
WealthCap Objekt Riem GmbH & Co. KG	Munich	5.2	5.2	EUR	30,630	1,431
WealthCap Objekt Riem II GmbH & Co. KG	Munich	5.2	5.2	EUR	46,082	(1,676)
WealthCap Objekt Schwabing GmbH & Co. KG	Munich	5.2	5.2	EUR	32,146	761
WealthCap Objekt Sendling GmbH & Co. KG	Munich	5.2	5.2	EUR	(822)	(813)
WealthCap Objekt Stuttgart Ib GmbH & Co. KG	Munich	>0.0	>0.0	EUR	21,775	(332)
WealthCap Objekt Stuttgart II GmbH & Co. KG	Munich	5.2	5.2	EUR	(170)	(177)
WealthCap Objekt Theresienhöhe GmbH & Co. KG	Munich	5.2	5.2	EUR	67,488	3,155
WealthCap Photovoltaik 1 GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0.0	>0.0	EUR	26,021	(223)
WealthCap Portfolio 3 GmbH & Co.						
geschlossene Investment KG	Grünwald	>0.0	>0.0			
WealthCap Private Equity 10 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	14,212	3,917
WealthCap Private Equity 11 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	5,471	1,675
WealthCap Private Equity 12 GmbH & Co. KG	Grünwald	>0.0	>0.0	EUR	58,879	3,050
WealthCap Private Equity 13 GmbH & Co. KG	Grünwald	>0.0	>0.0	EUR	47,661	2,148
WealthCap Private Equity 14 GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0.0	>0.0	EUR	28,216	1,349
WealthCap Private Equity 15 GmbH & Co. KG						
(share voting rights: 0.1%)	Grünwald	>0.0	>0.0	USD	19,049	554
WealthCap Private Equity 16 GmbH & Co. KG						
(share voting rights: 0.3%)	Grünwald	>0.0	>0.0	USD	4,135	134
WealthCap Private Equity 17 GmbH & Co.						
geschlossene Investment KG	Grünwald	>0.0	>0.0	EUR	13,426	1,161
WealthCap Private Equity 18 GmbH & Co.						
geschlossene Investment KG	Grünwald	>0.0	>0.0	EUR	9,683	841
WealthCap Private Equity 19 GmbH & Co.						
geschlossene Investment KG	Grünwald	>0.0	>0.0	EUR	8,940	(5,899)
WealthCap Private Equity 20 GmbH & Co.						
geschlossene Investment KG	Grünwald	>0.0	>0.0	EUR	2,208	(1,352)
WealthCap SachWerte Portfolio 1 GmbH & Co. KG	Grünwald	>0.0	>0.0	EUR	42,141	1,955
WealthCap SachWerte Portfolio 2 GmbH & Co.						
geschlossene Investment KG	Grünwald	>0.0	>0.0	EUR	90,090	(9,701)
WealthCap Spezial-AIF 1 GmbH & Co.						
geschlossene Investment KG	Munich	>0.0	>0.0	EUR	158,188	17,936
WealthCap Spezial-AIF 2 GmbH & Co.						
geschlossene Investment KG	Munich	5.2	5.2	EUR	63,429	3,481
WealthCap Spezial-AIF 3 GmbH & Co.						
geschlossene Investment KG	Munich	>0.0	>0.0	EUR	184,410	11,541

NAME	REGISTERED OFFICE	SHARE OF CAPITAL IN % TOTAL	OF WHICH HELD INDIRECTLY	CURRENCY	EQUITY CAPITAL in thousands of currency units	NET PROFIT in thousands of currency units
WealthCap Spezial-AIF 5 GmbH & Co.						
geschlossene Investment KG	Munich	5.1	5.1	EUR	(769)	(779)
WealthCap US Life Dritte GmbH & Co. KG						
(share voting rights: 0.0%)	Grünwald	0.1	0.1	USD	26,949	528
WealthCap Zweitmarkt 3 BASIS GmbH & Co. KG	Grünwald	>0.0	>0.0	EUR	36,027	1,373
WealthCap Zweitmarkt 3 PLUS GmbH & Co. KG	Grünwald	>0.0	>0.0	EUR	13,092	1,220
WealthCap ZweitmarktWerte Immobilien 4 GmbH & Co. KG	Munich	>0.0	>0.0	EUR	8,845	259
WH – Erste Grundstücks GmbH & Co. KG	Munich	6.0		EUR	82,496	18
Wohnungsbaugesellschaft der Stadt Röthenbach						
a. d. Pegnitz mit beschränkter Haftung	Röthenbach a. d. Pegnitz	5.2		EUR	3,223	80

List of Holdings (Continued)

Exchanges rates for 1 euro at 31 December 2017
Currency abbreviation according to the International Organisation for Standardisation (ISO) code.

China	1 euro =	7.8044	CNY
UK	1 euro =	0.88723	GBP
Pakistan	1 euro =	132.483	PKR
USA	1 euro =	1.1993	USD

Notes and comments to the list of holdings

Percentages marked < or > are rounded up or down to one decimal place, e.g. < 100.0% = 99.99% or > 0.0% = 0.01%.

1 UniCredit Bank AG has concluded profit-and-loss transfer agreements with the following companies:

	COMPANY	PROFIT/(LOSS) TRANSFERRED €'000
1.1	Food & more GmbH, Munich	(417)
1.2	HJS 12 Beteiligungsgesellschaft mbH, Munich	2
1.3	HVB Capital Partners AG, Munich	2,920
1.4	HVB Immobilien AG, Munich	7,697
1.5	HVB Profil Gesellschaft für Personalmanagement mbH, Munich	(445)
1.6	HVB Secur GmbH, Munich	1
1.7	HVB Verwa 4 GmbH, Munich	(361)
1.8	MERKURHOF Grundstücksgesellschaft mit beschränkter Haftung, Munich	2,514
1.9	UniCredit Beteiligungs GmbH, Munich	(14)
1.10	UniCredit Direct Services GmbH, Munich	(483)
1.11	UniCredit Leasing GmbH, Hamburg	20,000
1.12	Verwaltungsgesellschaft Katharinenhof mbH, Munich	437
1.13	Wealth Management Capital Holding GmbH, Munich	30,225

2 Profit and loss transfer to shareholders and partners.

3 The exemption under Section 264b, German Commercial Code and under Section 264 (3), German Commercial Code applies to the company.

4 Figures of the 2016 annual accounts are indicated for this consolidated company.

5 Where equity capital and net profit are not stated, the information is omitted due to minor importance compliant with Section 286 (3) 1 No. 1, German Commercial Code.

6 Equity capital amounts to minus €10,000 and the net profit €50,000.

7 Despite a holding of more than 20%, UniCredit Bank AG has no significant influence over the company on account of the ownership structure and voting patterns to date.

8 The company is held by a trustee for UniCredit Bank AG.

9 UniCredit Bank AG has the position of a limited partner under company law and participates in the profit of the company.

10 UniCredit Bank AG has the position of a limited partner under company law but does not participate in the profit of the company.

11 Pursuant to Section 340a (4) No. 2 German Commercial Code all holdings in large corporations with a share of voting rights greater than 5 percent.

Mortgage Banking

62 Coverage

The statement of coverage is as follows:

(€ millions)

	2017	2016
A. Mortgage bonds		
Standard coverage		
1. Loans and receivables with banks	—	—
Mortgage loans	—	—
2. Loans and receivables with customers	25,930	24,545
Mortgage loans	25,930	24,545
Other eligible cover[1]		
1. Other lending to banks	—	—
2. Bonds and other fixed-income securities	460	760
3. Equalisation claims on government authorities	—	—
Subtotal	**26,390**	**25,305**
Total mortgage bonds requiring cover	16,868	15,057
Excess coverage	**9,522**	**10,248**
B. Public-sector bonds		
Standard coverage		
1. Loans and receivables with banks	17	34
Mortgage loans	—	—
Municipal loans	17	34
2. Loans and receivables with customers	5,243	5,834
Mortgage loans	4	4
Municipal loans	5,239	5,830
3. Bonds and other fixed-income securities	269	269
Other eligible cover[2]		
Other lending to banks	—	—
Subtotal	**5,529**	**6,137**
Total public-sector bonds requiring cover	3,936	3,887
Excess coverage	**1,593**	**2,250**

1 compliant with Section 19 (1) of the German Pfandbrief Act
2 compliant with Section 20 (2) of the German Pfandbrief Act

63 Pfandbriefs outstanding and cover assets used

The following table shows Pfandbriefs outstanding and cover assets, broken down by Mortgage Pfandbriefs and Public Pfandbriefs: (€ millions)

	2017			2016		
	NOMINAL	PRESENT VALUE	RISK PRESENT VALUE[1]	NOMINAL	PRESENT VALUE	RISK PRESENT VALUE[1]
1. Mortgage bonds						
Mortgage bonds	16,868	17,978	17,205	15,057	16,441	15,523
thereof: derivatives	—	—	—	—	—	—
Covering assets[2]	26,390	28,493	27,196	25,305	27,718	26,208
thereof: derivatives	—	—	—	—	—	—
Excess coverage	**9,522**	**10,515**	**9,991**	**10,248**	**11,277**	**10,685**
2. Public-sector bonds						
Public-sector bonds	3,936	4,382	4,154	3,887	4,456	4,214
thereof: derivatives	—	—	—	—	—	—
Covering assets[3]	5,529	6,234	5,910	6,137	7,045	6,600
thereof: derivatives	—	—	—	—	—	—
Excess coverage	**1,593**	**1,852**	**1,756**	**2,250**	**2,589**	**2,386**

1 dynamic procedure compliant with Section 5 (1) No.2 of the German Pfandbrief Net Present Value Regulation
2 including further cover assets compliant with Section 19 (1) of the German Pfandbrief Act with a nominal amount of €460 million as at 31 December 2017 and €760 million at 31 December 2016
3 including no further cover assets compliant with Section 20 (2) of the German Pfandbrief Act as at 31 December 2017 and as at 31 December 2016

64 Maturity structure of Pfandbriefs outstanding and fixed-interest periods of respective cover assets

The following table shows the maturity structure of Pfandbriefs outstanding and fixed-interest periods of cover assets: (€ millions)

	2017		2016	
	MORTGAGE BONDS	COVERING ASSETS	MORTGAGE BONDS	COVERING ASSETS
1. Mortgage bonds[1]	**16,868**	**26,390**	**15,057**	**25,305**
up to 0.5 years	437	1,920	1,508	2,309
at least 0.5 years but less than 1 year	589	1,225	1,154	1,591
at least 1 year but less than 1.5 years	477	1,408	429	1,522
at least 1.5 years but less than 2 years	2,032	1,180	1,089	1,133
at least 2 years but less than 3 years	2,390	2,495	1,609	2,505
at least 3 years but less than 4 years	1,804	2,578	1,350	2,569
at least 4 years but less than 5 years	1,977	2,295	1,154	2,394
at least 5 years but less than 10 years	5,423	9,593	4,844	8,507
10 years or more	1,739	3,696	1,920	2,775
2. Public-sector bonds[2]	**3,936**	**5,529**	**3,887**	**6,137**
up to 0.5 years	101	405	341	440
at least 0.5 years but less than 1 year	136	264	118	516
at least 1 year but less than 1.5 years	593	286	635	454
at least 1.5 years but less than 2 years	123	431	81	238
at least 2 years but less than 3 years	745	911	451	667
at least 3 years but less than 4 years	136	477	774	849
at least 4 years but less than 5 years	689	418	106	428
at least 5 years but less than 10 years	747	1,328	866	1,366
10 years or more	666	1,009	515	1,179

1 including further cover assets in accordance with Section 19 (1) of the German Pfandbrief Act; broken down by fixed-interest period and maturity of Pfandbriefs respectively
2 including further cover assets in accordance with Section 20 (2) of the German Pfandbrief Act; broken down by fixed-interest period and maturity of Pfandbriefs respectively

Mortgage Banking (Continued)

65 Volume of claims used as cover for Pfandbriefs, broken down by size class

The following table shows volume of claims used as cover for Pfandbriefs:

(€ millions)

	2017	2016
Mortgage covering assets	**25,930**	**24,545**
up to and including €300,000	10,576	10,613
over €300,000 up to and including €1,000,000	3,990	3,713
over €1,000,000 up to and including €10,000,000	6,090	5,690
more than €10,000,000	5,274	4,529
Public-sector bonds[1]	**5,529**	**6,137**
up to and including €10,000,000	1,511	1,588
over €10,000,000 up to and including €100,000,000	1,742	2,004
more than €100,000,000	2,276	2,545

1 volume of claims used as cover for public Pfandbriefs according to size classes, in each case with respect to a debtor or a guaranteeing entity

66 Volume of claims used as cover for Mortgage Pfandbriefs, broken down by state in which the real property collateral is located and property type

The following table shows the volume of claims used as cover for Mortgage Pfandbriefs, broken down by state in which the real property collateral is located and property type:

(€ millions)

	2017		2016	
	RESIDENTIAL PROPERTY	COMMERCIAL PROPERTY	RESIDENTIAL PROPERTY	COMMERCIAL PROPERTY
1. Germany	**17,680**	**8,249**	**16,568**	**7,976**
Condominiums	4,289	—	4,167	—
Single-family and two-family houses	6,992	—	6,614	—
Multiple-family houses	6,261	—	5,639	—
Office buildings	—	4,183	—	3,806
Retail buildings	—	2,543	—	2,609
Industrial buildings	—	481	—	478
Other commercially used buildings	—	804	—	815
New buildings under construction, not yet profitable	109	166	128	200
Building land	29	72	20	68
2. France	**1**	**—**	**1**	**—**
Single-family and two-family houses	1	—	1	—
3. Italy	**—**	**—**	**—**	**—**
Single-family and two-family houses	—	—	—	—
Total	**17,681**	**8,249**	**16,569**	**7,976**

67 Volume of claims used as cover for Public Pfandbriefs, broken down by type of debtor or guaranteeing entity and its home country

The following table shows the volume of claims used as cover for Public Pfandbriefs broken down by type of borrower or guaranteeing entity (in case of a full guarantee) and head office (state) as well as by whether or not the guarantee was granted for reasons of promoting exports: **(€ millions)**

	2017	2016
1. Germany		
Central government	355	458
thereof owed	—	—
thereof guaranteed	355	458
Regional authorities	2,020	2,155
thereof owed	1,474	1,585
thereof guaranteed	546	570
Local authorities	2,889	3,192
thereof owed	2,338	2,484
thereof guaranteed	551	708
Other	45	82
thereof owed	28	48
thereof guaranteed	17	34
Total Germany	**5,309**	**5,887**
thereof owed	3,840	4,117
thereof guaranteed	1,469	1,770
Guarantees for reasons of promoting exports	355	458
2. Austria	**220**	**250**
Central government	220	250
thereof owed	200	250
thereof guaranteed	20	—
Total	**5,529**	**6,137**
thereof owed	4,040	4,367
thereof guaranteed	1,489	1,770
Guarantees for reasons of promoting exports	355	458

68 Other eligible cover

The following table shows the breakdown of other eligible cover for Pfandbriefs: **(€ millions)**

	2017	2016
1. Mortgage bonds	**460**	**760**
Equalization claims according to Section 19 (1) No. 1 PfandBG	—	—
All states	—	—
Money claims according to Section 19 (1) No. 2 PfandBG[1]	—	—
Germany	—	—
thereof: covered bonds according to Article 129 of Regulation (EU) No. 575/2013	—	—
Other states	—	—
Bonds according to Section 19 (1) No. 3 PfandBG[2]	460	760
Germany	460	760
Other states	—	—
2. Public-sector bonds	**—**	**—**
Equalization claims according to Section 20 (2) No. 1 PfandBG	—	—
All states	—	—
Money claims according to Section 20 (2) No. 2 PfandBG	—	—
All states	—	—
thereof: covered bonds according to Article 129 of Regulation (EU) No. 575/2013	—	—

1 without cover assets according to Section 4 (1) sentence 2 No. 1 and 2 German Pfandbrief Act
2 including cover assets according to Section 19 (1) No. 2 German Pfandbrief Act in conjunction with Section 4 (1) sentence 2 No. 1 and 2 German Pfandbrief Act

Mortgage Banking (Continued)

69 Key figures for Pfandbriefs outstanding and associated cover assets

The following table shows the breakdown of key figures for Pfandbriefs outstanding and their respective cover assets:

		2017	2016
1. Mortgage bonds			
Mortgage bonds outstanding	€ millions	16,868	15,057
thereof: share of fixed-interest Pfandbriefs (Section 28 (1) No. 9 PfandBG)	%	82.11	84.76
Eligible cover[1]	€ millions	26,390	25,305
thereof: total amount of loans and receivables exceeding the thresholds			
according to Section 13 (1) PfandBG (Section 28 (1) No. 7 PfandBG)	€ millions	—	—
thereof: total amount of loans and receivables exceeding the thresholds			
stated in Section 19 (1) No. 2 PfandBG (Section 28 (1) No. 8 PfandBG)	€ millions	—	—
thereof: total amount of loans and receivables exceeding the thresholds			
stated in Section 19 (1) No. 3 PfandBG (Section 28 (1) No. 8 PfandBG)	€ millions	—	—
thereof: share of fixed-interest cover (Section 28 (1) No. 9 PfandBG)	%	77.99	76.80
Net present value according to Section 6 Pfandbrief			
Net Present Value Regulation for each foreign currency, in euros			
(Section 28 (1) No. 10 PfandBG – balance of asset/liability sides)	€ millions	—	—
Volume-weighted average age of the loans and receivables			
(period passed since loan granting – seasoning) (Section 28 (1) No. 11 PfandBG)	years	7.6	8.1
Average weighted loan-to-value ratio (Section 28 (2) No. 3 PfandBG)	%	41.20	40.45
2. Public-sector bonds			
Public-sector bonds outstanding	€ millions	3,936	3,887
thereof: share of fixed-income Pfandbriefs (Section 28 (1) No. 9 PfandBG)	%	96.19	78.26
Eligible cover[2]	€ millions	5,529	6,137
thereof: total amount of loans and receivables exceeding the thresholds			
stated in Section 20 (2) No. 2 PfandBG (Section 28 (1) No. 8 PfandBG)	€ millions	—	—
thereof: share of fixed-income cover (Section 28 (1) No. 9 PfandBG)	%	82.41	82.82
Net present value according to Section 6 Pfandbrief			
Net Present Value Regulation for each foreign currency, in euros			
(Section 28 (1) No. 10 PfandBG – balance of asset/liability sides)	€ millions	—	—

1 including further cover assets according to Section 19 (1) German Pfandbrief Act
2 including further cover assets according to Section 20 (2) German Pfandbrief Act

70 Payments in arrears

Total amount of payments in arrears for at least 90 days in respect of the claims used as cover for Pfandbriefs and breakdown by states in which the real property collateral is located:

(€ millions)

	2017	2016
1. Mortgage bonds		
Payments in arrears of at least 90 days	—	(1)
Germany	—	(1)
Payments in arrears of at least 90 days, arrears equal at least 5% of the loan	—	—
Germany	—	—
2. Public-sector bonds		
Payments in arrears of at least 90 days	—	—
All states	—	—
Payments in arrears of at least 90 days, arrears equal at least 5% of the loan	—	—
All states	—	—

71 Foreclosures and sequestrations

The following table shows the breakdown of foreclosures and sequestrations carried out in 2017:

		OF WHICH IN 2017	
	NUMBER OF PROCEEDINGS	COMMERCIAL PROPERTY	RESIDENTIAL PROPERTY
1. Foreclosures and sequestrations			
a) Pending at 31 December 2017			
Foreclosure proceedings	295	47	248
Sequestration proceedings	13	3	10
Foreclosure and sequestration proceedings	246	49	197
	554	**99**	**455**
(comparative figures from 2016	558	103	455)
b) Foreclosures finalised in 2017	**16**	**2**	**14**
(comparative figures from 2016	39	2	37)
2. Properties repossessed			
As in the prevoius year the Pfandbrief bank did not have to repossess any properties during the year under review to prevent losses on mortgage loans.			

72 Interest in arrears

Interest in arrears on mortgage-covering assets due between 1 October 2016 and 30 September 2017 breaks down as follows:

(€ millions)

	2017	2016
Interest in arrears	—	—
Commercial property	—	—
Residential property	—	—

The present annual financial statements were prepared on 27 February 2018.

UniCredit Bank AG
The Management Board

Betocchi Drwenski | Buschbeck | Čortan

Dr Diederich | Schindler | Zadra

Declaration by the Management

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

Munich, 27 February 2018

UniCredit Bank AG
The Management Board

Betocchi Drwenski	Buschbeck	Čortan
Dr Diederich	Schindler	Zadra

Auditor’s Report

INDEPENDENT AUDITOR’S REPORT

To UniCredit Bank AG, Munich

REPORT ON THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS AND OF THE MANAGEMENT REPORT

Audit opinions

We have audited the annual financial statements of UniCredit Bank AG, Munich, which comprise the balance sheet as at 31 December 2017, the income statement for the financial year from 1 January to 31 December 2017 and the notes to the financial statements, including the accounting and measurement methods presented therein. In addition, we have audited the management report of UniCredit Bank AG, Munich, for the financial year from 1 January to 31 December 2017. In accordance with the German legal requirements, we have not audited the content of those parts of the management report specified in the “Other information” section of our auditor’s report.

In our opinion, on the basis of the knowledge obtained in the audit,

– the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to corporations and, in compliance with the German principles of proper accounting give a true and fair view of the assets, liabilities, and financial position of the Company as at 31 December 2017 and of its financial performance for the financial year from 1 January to 31 December 2017, and
– the accompanying management report as a whole provides an appropriate view of the Company’s position. In all material respects, this management report is consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the management report does not cover the content of those parts of the management report specified in the “Other information” section of our auditor’s report.

Pursuant to § 322 (3) Sentence 1 German Commercial Code (HGB), we declare that our audit has not led to any reservations relating to the legal compliance of the annual financial statements and of the management report.

Basis for the audit opinions

We conducted our audit of the annual financial statements and of the management report in accordance with § 317 German Commercial Code (HGB) and the EU Audit Regulation (No. 537/2014, referred to subsequently as “EU Audit Regulation”), and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s responsibilities for the audit of the annual financial statements and of the management report” section of our auditor’s report. We are independent of the company in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the annual financial statements and on the management report.

Key audit matters in the audit of the annual financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual financial statements for the financial year from 1 January to 31 December 2017. These matters were addressed in the context of our audit of the annual financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In the following we present the key audit matters we have determined in the course of our audit:

1. Loan loss provisions in the credit business
2. Determination of the fair value of financial instruments of the trading book
3. IT controls related to financial reporting
4. Valuation of significant legal risks from potential breach of financial sanctions

Our presentation of these key audit matters has been structured as follows:

– Description (including reference to corresponding information in the annual financial statements)
– Auditor’s response
– Key observations

1. Loan loss provisions in the credit business

a) UniCredit Bank AG provides loans to customers. In accounting, the valuation of loans to customers often require the use of estimates. In the annual financial statements, loan loss provisions are set off against the balance sheet item "loans to customers". Furthermore, provisions for credit risks are disclosed under other provisions. The valuation parameters used for the measurement of the loan loss provisions have a significant impact on the recognition respectively the amount of the required provisions for credit risk. In this respect, these provisions are subject to considerable uncertainty and therefore this issue was selected as a key audit matter. The disclosure regarding the loan loss provisions are enclosed in section 4 in the notes.

b) During the audit of the annual financial statements, we firstly audited the effectiveness of the internal controls that capture recording, processing and valuation of loans as well as related financial reporting. In doing so, we also took into account the relevant business organisation, including the significant IT systems and valuation models. The audit of the valuation also included the assessment of implemented processes and controls in place to identify the impaired loans. For a sample, we have audited the credit-worthiness of borrowers, the estimated collateral values and the liquidation periods for credit collaterals based on the historical values of comparable collaterals in the past. We used specialists from our Risk Advisory division who have their focus on credit risk management and IT audit. For the audit of valuation of loans and contingent liabilities as well as other financial commitments related to credit business, our focus was set on the significant impaired loans, since significant areas of judgement are exercised und these have a material impact on the valuation of loans and the recognition of loan loss provisions. We evaluated the valuation of loans based on Bank-internal forecasts for the future income and liquidity position of borrowers and assessed the appropriateness of the information basis used for planning purposes. In doing so, we critically challenged and assessed the underlying assumptions of the legal representatives with regard to the expected cash flows of the audited loans respectively the recovery of collaterals.

c) The development of the loan loss provisions was influenced by the favorable economic environment.

2. Determination of the fair value of financial instruments of the trading book

a) Financial instruments assets, which are valued at fair value, are disclosed net of a risk discount under the balance sheet item "Held-for-trading portfolio" in accordance with § 340e (3) German Commercial Code (HGB). Similarly, financial instruments liabilities at fair value are disclosed under the balance sheet item "Held-for-trading portfolio" in the financial statements. The valuation of financial instruments has been selected as a key audit matter as it is subject to complex accounting principles, valuation procedures and -methods and is partially based on estimates and assumptions made by the legal representatives. The disclosure made by the legal representatives regarding the valuation of financial instruments is enclosed in section 6 and 30 of the notes.

b) We have audited the organizational structure and relating processes with regard to the determination of fair value of financial instruments by examination of the adequacy and effectiveness of the implemented key controls. We used specialists from our Risk Advisory division for our audit. In particular our audit includes the independent verification process for pricing, the validation of valuation methods and assumptions, the approval process for new financial instruments as well as the audit of controls for recording business and valuation parameters and the flow of market data, the governance and the reporting processes including the corresponding controls. Noteworthy issues from disputes with counterparties and extraordinary gains or losses from the sale of financial instruments were investigated. For adjustments to the calculated fair values due to the Bank's creditworthiness, the counterparty credit risk, model risk mitigation, bid-ask spreads, refinancing costs and costs in connection with the liquidation for less actively traded instruments we have audited the assumptions, procedures and models of the Bank with regard to the use of valuation techniques used in the industry and a correct and comprehensible valuation. In addition, we conducted our own independent valuation of selected financial instruments and compared our results with the valuation performed by the Bank.

c) The valuation methods selected by the legal representatives of the Bank for the determination of the fair value of financial instruments are in line with industry standards and are, according to our evaluation, within an acceptable range.

3. IT controls related to financial reporting

a) As part of the preparation of the annual financial statements, the Bank uses a large number of IT applications that have numerous interfaces. In order to maintain the integrity of the data used for the preparation of the annual financial statements, the Bank has taken various precautionary measurements and implemented controls. The Bank has outsourced IT services to a large extent to UniCredit Business Integrated Solutions S.C.p.A., Milan (Italy), (UBIS) that has further outsourced a part of these services to other service providers. The IT controls related to financial reporting has been selected as a key audit matter, as the security of information affects many aspects of the accounting and financial reporting process, results in a large audit effort and is characterised by a high level of complexity. We refer to the disclosure of the legal representatives in section 4 Operational Risk in the risk report of the management report with regards to the outsourcing of IT services.

b) Based on our risk assessment, we have audited the design, implementation and functionality of the controls related to user rights and change management processes for the significant accounting-relevant IT applications by incorporating IT-specialists from Risk Advisory for the audit. In doing so, we have coordinated the plan for the ISAE 3402 audit with the ISAE 3402 auditor at UBIS and the group auditors of UniCredit S.p.A. and utilised the audit activities and -results of the ISAE 3402 auditors and the group auditors. We have informed ourselves of the professional competence, independence and regulatory governance of these auditors. During the utilisation of the reports, we have inter alia critically assessed the reporting related to these audit procedures and audit results.

c) IT controls related to financial reporting implemented by the Bank were enhanced over the past years. They are adequately designed with regard to the complexity and size of the Bank.

4. Valuation of significant legal risks from potential breach of financial sanctions

a) Provisions for legal risks are disclosed under the balance sheet item “other provisions” in the annual financial statements, of which a part relates to a potential breach of financial sanctions. This issue has been selected as a key audit matter, since the recognition and measurement of these quantitatively material legal risks are based to a large extent on estimates and assumptions made by the legal representatives. The disclosure made by the legal representatives regarding the provisions in relation to the legal risks is enclosed in section 39 of the notes to the annual financial statements and in section 4 Operational Risk in the risk report of the management report.

b) As there is an increased risk of misstatements in accounting for estimates and the valuation choices made by the legal representatives have a significant effect on the annual result, we have audited the operational and organizational structure with regard to the recording and valuation of legal risks. In addition, we have assessed the appropriateness of the amount stated, i.a. using values determined according to comparable settlement proceedings and based on the calculations and assessments provided by the Bank’s attorneys and requested confirmation letters from them. With the support of a financial sanctions expert, we have critically considered the underlying assumptions of the legal representatives. In addition, we have reviewed bank-internal investigation results.

c) The provision created by the legal representatives for the legal risks from a potential breach of financial sanctions is within the spectrum of estimations of the Bank’s Attorneys. In our opinion, the assumptions selected by the legal representatives are justified.

Other information

The legal representatives are responsible for the other information. The other information comprises:

– the statement on business management included in section “Corporate structures of UniCredit Bank AG” of the management report pursuant to § 289f (4) German Commercial Code (HGB) (gender quota disclosures),
– the legal representatives’ confirmation relating to the annual financial statements and to the management report pursuant to § 264 (2) sentence 3 and § 289 (1) sentence 5 German Commercial Code (HGB) respectively, and
– the remaining parts of the annual report, with the exception of the audited annual financial statements and management report and our auditor’s report.

Auditor’s Report (Continued)

Our audit opinions on the annual financial statements and on the management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information
– is materially inconsistent with the annual financial statements, with the management report or our knowledge obtained in the audit, or
– otherwise appears to be materially misstated.

Responsibilities of the Legal Representatives and the Supervisory Board for the Annual Financial Statements and the Management Report
The legal representatives are responsible for the preparation of the annual financial statements, that comply, in all material respects, with the requirements of German commercial law applicable to corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German principles of proper accounting. In addition, the legal representatives are responsible for such internal control as they, in accordance with German principles of proper accounting, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether intentional or unintentional.

In preparing the annual financial statements, the legal representatives are responsible for assessing the Company’s ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, the legal representatives are responsible for the preparation of the management report that, as a whole provides an appropriate view of the Company’s position and is, in all material respects, consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, the legal representatives are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the management report.

The Supervisory Board is responsible for overseeing the Company’s financial reporting process for the preparation of the annual financial statements and of the management report.

Auditor’s Responsibilities for the Audit of the Annual Financial Statements and of the Management Report
Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company’s position and, in all material respects, is consistent with the annual financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our audit opinions on the annual financial statements and on the management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 German Commercial Code (HGB) and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements and this management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also

– identify and assess the risks of material misstatement of the annual financial statements and of the management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
– obtain an understanding of internal control relevant to the audit of the annual financial statements and of arrangements and measures relevant to the audit of the management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems of the Company.
– evaluate the appropriateness of accounting policies used by the legal representatives and the reasonableness of estimates made by the legal representatives and related disclosures.
– conclude on the appropriateness of the legal representatives' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the annual financial statements and in the management report, or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to be able to continue as a going concern.
– evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German principles of proper accounting.
– evaluate the consistency of the management report with the annual financial statements, its conformity with German law, and the view of the Company's position it provides.
– perform audit procedures on the prospective information presented by the legal representatives in the management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by the legal representatives as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the annual financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further information pursuant to Article 10 of the EU Audit Regulation
We were elected as auditor by the annual general meeting on 22 May 2017. We were engaged by the supervisory board on 20 June 2017. We have been the auditor of UniCredit Bank AG, Munich, without interruption since the financial year 2013.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

In addition to the financial statement audit, we have provided to the Company, respectively to entities controlled by the company, in particular the following services that are not disclosed in the annual financial statements or in the management report:
– Audits and reviews of reporting packages
– Audits recording to § 36 of the Securities Trading Act
– Project assurance related to the implementation of new accounting standard
– Non audit services in connection with a follow-up audit

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Martin Kopatschek.

Munich, March 6, 2018

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Prof Dr Leuschner)
German Public Auditor

(Kopatschek)
German Public Auditor

The translation of the Independent Auditor's Report is for convenience only; the German version prevail.

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