Annual Report

2019

Deutsche Pfandbriefbank Group

OVERVIEW

Deutsche Pfandbriefbank Group (pbb Group)		2019	2018
Operating performance according to IFRS			
Profit before tax	in € million	216	215
Net income	in € million	179	179
Key ratios			
Cost-income ratio	in %	43.5	44.2
Return on equity before tax	in %	6.9	7.1
Return on equity after tax	in %	5.7	5.9
Earnings per share[1]	in €	1.20	1.24
Dividend per share[2]	in €	0.90	1
New business volume Real Estate Finance[3]	in € billion	9.0	9.5
Balance sheet figures according to IFRS		**31.12.2019**	**31.12.2018**
Total assets	in € billion	56.8	57.8
Equity	in € billion	3.2	3.3
Financing volumes Real Estate Finance	in € billion	27.1	26.8
Key regulatory capital ratios[4]		**31.12.2019**	**31.12.2018**
CET1 ratio	in %	15.2	18.5
Own funds ratio	in %	20.4	24.9
Leverage ratio	in %	5.4	5.3
Staff		**31.12.2019**	**31.12.2018**
Employees (on full-time equivalent basis)		752	750
Long-term issuer rating/outlook[5][6]		**31.12.2019**	**31.12.2018**
Standard & Poor's		A-/Negative	A-/Negative
Moody's Pfandbrief rating[6]		**31.12.2019**	**31.12.2018**
Public sector Pfandbriefe		Aa1	Aa1
Mortgage Pfandbriefe		Aa1	Aa1

[1] For calculation see note "Earnings per share".
[2] 2019 shows the proposal to the Annual General Meeting on 28 May 2020 and 2018 the paid dividend in June 2019.
[3] Including prolongations with maturities of more than one year.
[4] Values as of 31 December 2019 after confirmation of the 2019 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting); values as of 31 December 2018 after confirmation of the 2018 financial statements and appropriation of profits.
[5] Please refer to the "Report on economic position" for a detailed description of the ratings.
[6] The ratings of unsecured liabilities may diverge from the issuer ratings.

Information due to rounding

Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Explanation of alternative performance measures

For further information regarding the definition, usefulness and calculation of alternative performance measures see "investors/financial-reports" at www.pfandbriefbank.com.

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Letter from the Management Board

Dear shareholders, dear business partners,
Ladies and Gentlemen,

Deutsche Pfandbriefbank AG (pbb) again performed well in the financial year 2019 during times which continued to be challenging. At €216 million, pre-tax profit was up on the previous year's figure. We were also able to further increase net interest income – our most important income item, allowing us to offset significantly higher risk provisioning and slightly increased general and administrative expenses. We would like our shareholders to participate in this good result once again: we wish to distribute 75% of consolidated profit attributable to ordinary shareholders, and therefore intend to propose a dividend of €0.90 per share entitled to dividend payments to the Annual General Meeting.

In what is now the tenth year of the current cycle, the real estate markets remained in good shape overall – despite weaker developments in individual markets and persistently very low yields. Demand in the investment and space markets was high, so prices and rents remained stable for the most part. Renewed interest rate cuts by the ECB increased the relative attractiveness of the real estate asset class in particular. However, competition among real estate investors remained fierce – and not only from banks, but from other lenders too.

In this very challenging market, pbb continued to build on its previous year's level of new business while adhering to its high risk standards. We recorded a volume of €9.0 billion in our Commercial Real Estate Finance business, meeting our new business target. We also maintained our average gross new business margin at a stable level of around 155 basis points over the year. As a result of the strong new business, our average interest-bearing funding volume increased. Thus, new business not only more than offset ongoing repayments relating to strategic business, but also the reduction in business from the non-strategic Value Portfolio, which is in the process of being wound down.

The slightly increased average volume, and a slightly higher total bank margin benefiting from the higher weighting of the higher-margin real estate finance portfolio, resulted in higher interest income from our operative business, which were however offset by lower interest income from the equity and liquidity book. At the same time, funding costs fell. The funding costs for new exposures remained below those for maturities, despite an increase over the previous year. In addition, in a negative interest rate environment, we were able to impose floors on lending rates. Operating income also benefited from an increase in prepayment fees.

This was offset by higher risk provisioning, since we made gross additions of €31 million to loss allowance especially in view of the increased probability of a global economic and sector-specific downturn. Net risk provisioning for the full year amounted to €49 million, slightly above the planned standard risk costs. General and administrative expenses also increased slightly to €202 million. This was due to a number of factors, including regulatory-driven projects that increased operating expenses, and our increased investment in pbb's future. On the other hand, we have been able to implement savings with efficiency gains resulting from the centralisation of certain tasks at head office, and from re-dimensioning our Public Investment Finance business.

Increased risk provisioning was not the only measure designed to stabilise pbb's already solid position: we also raised our risk weighting in strategic sub-portfolios as at year-end, to reflect the new requirements of the European Banking Authority (EBA) and the international banking regulations of the Basel IV regime. In this way, we are addressing capital market expectations and cushioning any cyclical fluctuations in RWAs. As a result, risk-weighted assets – which we have now calibrated to meet future Basel IV requirements – have increased. Due to the Bank's strong capital base, its capital ratios remain well above regulatory requirements even after these changes. We will continue to report RWAs and capital ratios on this basis in the future.

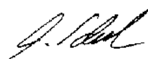
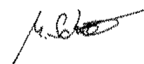
In 2019, we once again implemented or initiated a series of improvements and innovations. One of these initiatives makes particularly good use of the diversity within the Bank: employees from a wide variety of functions, across different locations and from all levels of the corporate hierarchy, are working as part of a team to develop new ideas for the Bank's digitalisation. We are concentrating on three key areas: client interfaces, the efficiency of internal processes, and new sources of income. We are also making use of software robots and applications with artificial intelligence (AI) in various places. A new portal linking our clients to pbb is currently being developed and is scheduled for market launch in the second half of 2020. After initially focusing on the German market since its launch in 2018, our public sector lending platform CAPVERIANT has now expanded its business to France and is experiencing growing user numbers together with a significant increase in the volume of financing tenders.

In addition, we plan to take further steps towards aligning our core real estate finance business with sustainability criteria: we plan to introduce green loans and issue green bonds. This way, we hope to meet the requirements of a broad range of stakeholders in terms of sustainable finance.

In view of market and competitive conditions in Commercial Real Estate Finance, pbb is remaining cautious for 2020 and will be maintaining its conservative risk policy. Moreover, pbb is continuing to focus on strong operating performance. The latest concern is the impact the spread of the corona virus will have on the global economy. The effects cannot currently be assessed. For the 2019 accounts, pbb considered an informed advice of the Institute of Public Auditors in Germany and no effect was recognised.

We owe pbb's continued success to our clients and all pbb employees. We would therefore like to thank our clients for the trust they place in us and all our employees for their strong level of commitment.

Yours sincerely

Andreas Arndt	Thomas Köntgen	Andreas Schenk	Marcus Schulte
CEO and Chief Financial Officer	Deputy CEO Real Estate Finance and Public Investment Finance	Member of the Management Board, Chief Risk Officer	Member of the Management, Board, Treasurer

Report of the Supervisory Board

Dear shareholders,

2019 was another year impacted by a high level of competition, the low interest-rate environment, increasing regulatory requirements, growing digitalisation, and global economic uncertainty. Despite this challenging market environment, Deutsche Pfandbriefbank Group ("pbb Group") was able to maintain its stable business development in the 2019 financial year – and to uphold its leading market position in commercial real estate finance. While continuing to adhere to its high risk standards, pbb once again generated very good new business volume within the planned range as well as a solid business performance that exceeded expectations.

Topics such as digitalisation, platform economy, and the centralisation of infrastructure tasks became more relevant from a strategic perspective. All these measures allow pbb to continuously develop in line with the changes in the markets, so as to continue to maintain scope for action and flexibility. Accordingly, the strategic digitalisation initiatives launched in 2018 – such as the development of a digital client portal – were refined in 2019, and the existing business model was consistently fine-tuned to ensure its future viability. Furthermore, pbb continued the expansion of its US business, as well as of the platform business via subsidiary CAPVERIANT GmbH.

As always, supporting ongoing business development, continuously developing the business strategy and monitoring the corresponding risks were key focuses for the supervisory and advisory activities of the Supervisory Board. The Supervisory Board also devoted particular attention in 2019 to issues concerning supervisory regulation and IT.

The Supervisory Board appointed Marcus Schulte (Senior General Manager until 31 December 2018) as member of the Management Board, with effect from 1 January 2019. At the end of the usual induction phase in line with the supervisory requirements, Mr Schulte assumed responsibility on the Management Board, as scheduled, for the Treasury portfolio and for the Portfolio Analysis and Property Valuation divisions. Since the fourth quarter of 2019, he has also been responsible for the IT/Organisation division.

CORPORATE GOVERNANCE

The Supervisory Board continuously monitored the Management Board during the financial year 2019, as in the past, and provided it with regular advice on the management of the Company.

It assured itself in all cases that the management measures taken by the Management Board were lawful, appropriate, due and proper. The Management Board fulfilled its duties to provide information, and informed the Supervisory Board in a regular, timely and comprehensive manner, both in writing and orally, about matters and measures relevant to the Company. This also included information on any deviations between target and actual figures or developments. The members of the Supervisory Board had sufficient opportunity, at all times, to critically assess the reports and proposed resolutions submitted by the Management Board, and to make their own suggestions during Supervisory Board committee meetings and in the plenary sessions. The CEO also reported to the Chairman of the Supervisory Board, as well as to the respective committee chairmen, on all material developments between meetings.

In particular, the Supervisory Board held in-depth discussions on, and reviewed the plausibility of, all business transactions material to the Company, on the basis of written and oral reports provided by the Management Board.

The Supervisory Board examined the requisite independence of the external auditors of the financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft ("KPMG"), instructed KPMG with the audit following the resolution of the Annual General Meeting, and agreed on the auditors' fee.

On 27 February 2020, the Supervisory Board concerned itself with the Declaration of Compliance with the German Corporate Governance Code for the financial year 2019 (https://www.pfandbriefbank.com/en/investors/mandatory-publications.html). Please also refer to the Group's Remuneration Report, which is printed in this Annual Report. With respect to the requirements of the German Corporate Governance Code, in conjunction with section 111 (5) of the German Stock Corporation Act (Aktiengesetz – "AktG") concerning the target and current quotas of the under-represented gender on the Supervisory Board and the Management Board, please refer to the table outlining the composition of the Supervisory Board and its committees, and to the comments in the Corporate Governance Statement and in the Non-Financial Report.

MEETINGS OF THE SUPERVISORY BOARD

The Supervisory Board held eight meetings in 2019 (including three extraordinary meetings), plus a two-day strategy meeting. Its members were:

Dr Günther Bräunig (Chairman), Dagmar Kollmann (Deputy Chairman), Dr Jutta Dönges, Dr Thomas Duhnkrack, Dr Christian Gebauer-Rochholz, Georg Kordick, Joachim Plesser, Oliver Puhl and Heike Theißing.

All ordinary meetings addressed the current business situation of pbb Group, which was discussed in detail with the Management Board in each case. The Management Board informed the Supervisory Board, regularly and in a timely manner, about pbb's financial situation and performance. During the ordinary meetings, the Supervisory Board also received reports on: the risk position, risk management, new business, the liquidity situation and strategy, funding and share price developments, current regulatory issues and audits, as well as on significant events of material importance to the assessment of the Company's position, development and management. Furthermore, the Management Board informed the Supervisory Board about IT topics as well as about supervisory topics and audits continuously and comprehensively in the year under review. The Supervisory Board particularly concerned itself with issues regarding the Targeted Review of Internal Models (TRIM) multiple times and in great detail, with supervisory reviews of Internal Rating Based Approach (IRBA) models, and future Basel IV requirements and their impact on the Bank's risk-weighted assets. In this context, the Supervisory Board made use of extensive external expertise, intensively discussing the reports prepared.

The ordinary meeting on 15 February 2019 dealt in particular with the target achievement at institutional level as well as with the variable remuneration for the members of the Management Board for the financial year 2018 and with the redetermination of their variable remuneration retained for 2016 and 2017 (including the penalty/malus review and backtesting). Further focal points of the meeting were pbb's recovery plan, in line with regulatory requirements, the Variable Remuneration Plan for 2019, updating the assignment of authority of the Risk Management and Liquidity Strategy Committee, and the report on the examination of efficiency, which concluded the evaluation of the Supervisory Board and the Management Board for the year 2018. The Supervisory Board also resolved the annual Declaration of Compliance, the Report of the Supervisory Board, and the Corporate Governance Statement pursuant to sections 289f and 315d of the HGB. Last but not least, the Supervisory Board addressed current IT projects, the dividend strategy, and determined training topics within the scope of regular continued professional development measures for the Supervisory Board.

In the accounts review meeting held on 21 March 2019, the consolidated financial statements for 2018 were approved and the financial statements for 2018 confirmed. The Supervisory Board also concerned itself with the Non-Financial Report pursuant to sections 289b et seq. and 315b et seq. of

the HGB. Moreover, the Annual General Meeting for 2019 was prepared and respective resolutions regarding the agenda, including the submitted proposed resolutions – in particular with regard to the appropriation of profit and appointment of the external auditors for the 2019 financial year – were adopted. The Supervisory Board once again dealt with the update of the Risk Management and Liquidity Strategy Committee's assignment of authority, as well as with Supervisory Board remuneration, the control and profit and loss transfer agreement with CAPVERIANT GmbH, the tender process for the rotation of external auditors, improvements in the IT infrastructure, and Brexit.

During an extraordinary conference call on 16 April 2019, the Supervisory Board discussed a reclassification within the Company's capital accounts for tax purposes.

The meeting on 10 May 2019 was dominated by pbb Group's first-quarter report for 2019. The Supervisory Board also discussed pbb's digitalisation initiatives, the current status of bundling core functions at the Bank, the Remuneration Reports 2018, the preparations for the Annual General Meeting, the status quo of Brexit and that of the tender regarding the mandate for the external auditors. The Supervisory Board also resolved an adjustment to the Management Board's assignment of responsibilities, leading to Mr Schenk taking over responsibility for the Compliance division, and Mr Schulte for the IT/Organisation division from Mr Arndt as of October 2019.

In the extraordinary meeting held on 7 June 2019, the auditor selection and corresponding recommendations of the Audit Committee were once again discussed, and a decision made in line with the committee's proposal.

During its meeting on 9 August 2019, the Supervisory Board discussed pbb Group's interim report as at 30 June 2019, and the review of the six-month financial statements and of the Management Report by the external auditors. The Board also resolved to amend pbb's risk strategy, dealing with the Internal Rating Based Approach (IRBA) models to determine risk-weighted assets, the current status of CAPVERIANT GmbH, and the upgrade of the IT infrastructure, particularly regarding the issues of cybercrime and data protection.

On the basis of the debates held in the course of its annual strategy meeting on 10/11 October 2019, on 8 November 2019 the Supervisory Board initially discussed pbb Group's results for the third quarter of 2019 and then adopted the corporate planning and the business strategy presented by the Management Board, each for the financial years 2020 to 2022, as well as the IT and risk strategy for 2020. The Supervisory Board also prepared the examination of efficiency for the Management Board and Supervisory Board pursuant to section 25d (11) of the KWG, and determined the parameters for the risk-adjusted performance measurement at the institutional level, as well as Management Board targets for the financial year 2020. Furthermore, approval was given for the identification of risk takers and for the the appropriateness of the remuneration system. The Supervisory Board also concerned itself with the new draft of the German Corporate Governance Code and its impact on pbb, and – in particular – with the ECB's draft SREP notice.

In an extraordinary conference call on 29 November 2019, the Supervisory Board continued dealing with the agenda of its meeting held on 8 November 2019, i.e. the revision of the German Corporate Governance Code 2019, including the resolution of amended Rules of Procedure for the Management Board, Supervisory Board, and Audit Committee, and the annual report of the Executive and Nomination Committee on corporate governance topics. Other issues discussed were the current status of the securitisation transaction UK-3, Brexit, and the reform of reference rates.

SUPERVISORY BOARD COMMITTEES

The following Supervisory Board committees convened in the year under review (1 January to 31 December 2019): the Executive and Nomination Committee, the Audit Committee, the Risk Management and Liquidity Strategy Committee, and the Remuneration Committee.

The **Executive and Nomination Committee** held eight meetings (including three extraordinary meetings); it consisted of Dr Günther Bräunig (Chairman), Dagmar Kollmann and Joachim Plesser.

The committee concerned itself with strategic and current regulatory issues, as well as with matters concerning the Management Board, for which it prepared corresponding proposals for the plenary meeting. These primarily involved the achievement of the Management Board members' targets, as well as the determination of their variable remuneration for the financial year 2018 (including penalty review). The committee also prepared the 2019 examination of efficiency for the Management Board as well as the Supervisory Board (including its committees); it informed the Supervisory Board about corporate governance issues and concerned itself with the Corporate Governance Statement in accordance with sections 289f and 315d of the HGB, including the Declaration of Compliance with the German Corporate Governance Code. In addition, the Executive and Nomination Committee discussed the new version and implementation of the new German Corporate Governance Code, the adjustment of the Supervisory Board remuneration structure, the changes to the Management Board's assignment of responsibilities, the ECB review on internal rating models, long-term succession planning in the Supervisory Board, and the determination of training topics for the Supervisory Board in 2019. Within the scope of three extraordinary meetings, the Executive and Nomination Committee also dealt with special issues such as the reclassification within the Company's capital accounts for tax purposes and subsequent dividend distributions without tax deductions, as well as with strategic M&A options.

The **Audit Committee** held seven meetings, two of which were extraordinary; the committee consisted of Dagmar Kollmann (Chairman), Dr Günther Bräunig, Dr Jutta Dönges and Dr Thomas Duhnkrack.

During its meetings, the committee reviewed and discussed the Annual Financial Statements and Consolidated Financial Statements for 2018, the interim reports (or statements) of 2019, and the reports by Internal Audit and the external auditors KPMG on internal and external audit findings. In addition, the Audit Committee discussed the effects of current regulatory issues with the Management Board, and was informed of the development of ongoing audits. The Audit Committee also concerned itself with the mandate for the external auditors and their audit plan for the 2019 financial year. Furthermore, the Audit Committee satisfied itself concerning the independence of the external auditors, and recommended to the Supervisory Board to propose to the Annual General Meeting to elect KPMG as external auditors for the 2019 financial year. In addition, the Audit Committee discussed the UK3 securitisation transaction, the dividend strategy/distribution for the 2018 financial year, and current regulatory issues and supervisory audits, especially concerning IRBA models and their impact on the Bank's risk-weighted assets. Furthermore, regular reports were received on the internal control system and the monitoring of key controls implemented, current litigation, Compliance issues, data protection and IT security, special accounting issues, the results of external audits, as well as the audit plan established by Internal Audit and its implementation.

As in the previous year, the early preparation of the auditor selection within the scope of the required rotation of external auditors – to be carried out at the latest for the 2021 financial year – represented a key focus of the Audit Committee's work in 2019. The public tender and internal selection process initiated in 2018 was continued and completed, following an intensive, fair, transparent, and non-discriminatory procedure.

The **Risk Management and Liquidity Strategy Committee** convened for four ordinary meetings. In addition it discussed credit exposures requiring Supervisory Board approval, usually during monthly conference calls. The committee consisted of Joachim Plesser (Chairman), Dr Jutta Dönges, Dagmar Kollmann and Oliver Puhl.

It supported the Supervisory Board's supervision of risk management and liquidity management; it reviewed the Management Board's risk reporting and was involved in the credit approval process to the extent laid down in the Rules of Procedure. The committee also regularly discussed new business developments as well as the liquidity and funding status and syndication business. During 2019, the committee also concerned itself with reports on sub-portfolios (including development financings); it dealt with foreclosures, specific allowances, the reporting of own funds in accordance with the German Solvency Regulation, country limits, and asset/liability management. Furthermore, the Risk Management and Liquidity Strategy Committee concerned itself with the recovery plan, in line with regulatory requirements, and – in great detail and multiple times – with the supervisory reviews of IRBA models and future Basel IV requirements and their impact on the Bank's risk-weighted assets, developments on the real estate markets to be expected in the medium term, and with updating the risk strategy and the Risk Management and Liquidity Strategy Committee's assignment of authority and Rules of Procedure.

In addition, the committee addressed individual credit exposures on numerous occasions, usually in the form of monthly conference calls. These related to new business, regular re-submissions and approvals for change applications, required to be submitted under the committee's Rules of Procedure.

The **Remuneration Committee** held four meetings; it consisted of Dr Günther Bräunig (Chairman), Dagmar Kollmann, Joachim Plesser and Heike Theißing.

The committee concerned itself with the Remuneration Reports, the variable remuneration for the financial year 2018, the target agreements for and achievements of the Management Board members as well as the Variable Remuneration Plan 2019 for the Management Board. Furthermore, for the Supervisory Board the committee prepared the approval of the determination of risk-taker functions, and the determination of parameters for the risk-adjusted performance measurement at an institutional level. Other key focuses of the meetings were on the Bank's remuneration system, including the assessment of its appropriateness, as well as on regulatory changes and the extension of the Remuneration Officer's mandate.

Supervisory Board of pbb

Name place of residence initial appointment	Principal activity	Supervisory Board function and meeting attendence	Committee function and meeting attendence Executive and Nomination Committee	Audit Committee	Risk Management and Liquidity Strategy Committee	Remuneration Committee
Dr. Günther Bräunig Frankfurt/Main, Germany 14.8.2009	CEO of KfW	Chairman 8 of 8	Chairman 8 of 8	Member 7 of 7		Chairman 4 of 4
Dagmar Kollmann Vienna, Austria 14.8.2009	Entrepreneur	Deputy Chairman 8 of 8	Member 8 of 8	Chairman 7 of 7	Member 4 of 4	Member 4 of 4
Dr. Jutta Dönges Frankfurt/Main, Germany 21.6.2018	Member of the Executive Board Bundesrepublik Deutschland – Finanzagentur GmbH	Member 8 of 8		Member 7 of 7	Member 4 of 4	
Dr. Thomas Duhnkrack Kronberg/Taunus, Germany 21.7.2015	Entrepreneur	Member 5 of 8		Member 4 of 7		
Dr. Christian Gebauer-Rochholz Hochheim, Germany (Employee representative) 20.11.2012	Bank employee	Member 7 of 8				
Georg Kordick Poing, Germany (Employee representative) 22.2.1990	Bank employee	Member 8 of 8				
Joachim Plesser Ratingen, Germany 26.4.2014	Consultant	Member 8 of 8	Member 8 of 8		Chairman 4 of 4	Member 4 of 4
Oliver Puhl Frankfurt/Main, Germany 13.5.2016	Entrepreneur	Member 8 of 8			Member 4 of 4	
Heike Theißing Munich, Germany (Employee representative) 7.7.2011	Bank employee	Member 8 of 8				Member 4 of 4

TRAINING AND CONTINUOUS PROFESSIONAL DEVELOPMENT

The members of the Supervisory Board assumed responsibility for undertaking any training or professional development measures necessary to fulfil their duties. The Company supported them to the extent required in this regard. Since the second half of 2018, regular training has also been provided ahead of the regular Supervisory Board meetings in the form of presentations by external speakers. The topics handled in 2019 included digitalisation, SREP/ICAAP and social engineering/cybersecurity, and – within the scope of the Supervisory Board's annual strategy meeting – current developments in the cooperation with digital platforms and start-ups. This regular training programme for the entire Supervisory Board will be continued.

ANNUAL FINANCIAL STATEMENTS

KPMG, the auditors of the Annual and Consolidated Financial Statements elected by the Annual General Meeting, audited the Annual and Consolidated Financial Statements of pbb as at 31 December 2019, including the consolidated management reports, and issued them with unqualified audit opinions. The Non-Financial Statement, which pbb is required to submit as part of the Management Report pursuant to sections 289b et seq. and 315b et seq. of the HGB, was published in a separate Non-Financial Report included in the present Annual Report. In the context of its audit obligation as per section 171 (1) of the AktG, the Supervisory Board made use of the possibility of a content-related external audit of the Non-Financial Statement, carried out by KPMG in the course of a separate commissioning.

KPMG has submitted a declaration of its independence to the Supervisory Board. The financial statements documents and audit reports were submitted to all Supervisory Board members in good time. The Audit Committee addressed the financial statements documents in its meeting on 17 March 2020. The Annual Financial Statements and Consolidated Financial Statements, the Combined Management Report as well as audit reports were discussed in detail with the Management Board and representatives of the external auditors. Following its own review, the Supervisory Board did not raise any objections to the audit results submitted by the external auditors. In the accounts review meeting held on 18 March 2020, the Supervisory Board approved the Consolidated Financial Statements prepared by the Management Board, and the Annual Financial Statements were adopted. During the same meeting, the Supervisory Board also discussed the Management Board's proposal for the appropriation of profits with the Management Board. Following its examination, the Supervisory Board endorsed the proposal for the appropriation of profit submitted by the Management Board.

The Supervisory Board would like to thank the Management Board, and all staff, for their strong personal commitment and successful contribution during the financial year 2019.

For the Supervisory Board

Dr Günther Bräunig
Chairman

Combined Management Report

Fundamental Information about the Group

The management report of Deutsche Pfandbriefbank AG (pbb) and the Group management report are combined, in accordance with the German Accounting Standard (GAS) 20. Thus, besides Deutsche Pfandbriefbank Group (pbb Group), the report also includes information referring solely to the parent entity pbb (with explanations on the basis of the German Commercial Code (HGB)). The annual report of pbb in accordance with HGB and the consolidated management report are published simultaneously in the German Federal Gazette (Bundesanzeiger).

GROUP STRUCTURE

The pbb Group consists primarily of the parent entity pbb. Information provided in this consolidated management report relates – if not explicitly stated otherwise – to both pbb Group as a whole and pbb as an individual company.

In addition to the Bank's headquarters in Garching near Munich, pbb Group has offices at four locations across Germany (Eschborn, Düsseldorf, Hamburg and Berlin). Outside Germany, pbb maintains a presence at five locations: London, Madrid, Paris, Stockholm, and New York City. The Bank operates most of its international financing activities from these locations.

BUSINESS MODEL AND STRATEGY

The strategic business segments of pbb Group are Real Estate Finance (REF) and, additionally, Public Investment Finance (PIF); the focus is on business eligible for inclusion in Pfandbrief cover. The geographic focus is on Europe and the USA. Its significant core markets are Germany, France, the United Kingdom, the Nordic countries and selected Central and Eastern European countries, as well as Spain, the Benelux countries and the US.

Lending is the Group's core business, with a focus on primary client business. Besides traditional financing solutions tailored to clients' needs, the Group offers its clients derivatives for hedging risks associated with lending. pbb does not maintain a trading book for securities or derivatives portfolios held to realise short-term gains.

In the lending business, pbb Group either acts as a sole lender or, particularly for large-volume transactions, cooperates with financing partners. In this regard, the Group has a wide network of banking and other partners, including insurance companies and private equity firms. In this so-called syndicate business, when acting as arranger, the Group takes over the complete coordination between the syndicate members and the borrower or, in the role of an Agent, deals with tasks in connection with the management of syndicated loans.

In addition, pbb Group acts as an underwriter, initially being the sole provider of financing and then selling parts of this loan to interested partners in the context of syndication.

In the course of its digitalisation strategy, pbb Group launched the digital platform CAPVERIANT on the German market in 2018, and on the French market in 2019. CAPVERIANT brings together borrowers and investors in the public investment finance sector, with a focus on the intermediation of budget financing solutions for public-sector authorities. With respect to the loans arranged by

CAPVERIANT, pbb does not operate as a lender. Only in the case of 'bank-in-the-middle'-products, where an investor cannot act as the primary lender for regulatory reasons, pbb may assume the short-term role of a lender ('fronting bank'). Immediately after the loan has been originated, this role is passed on to the investor.

pbb Group intends to further advance its digital transformation: the chosen approach comprises three main thrusts, focusing on further development of client interfaces, enhancing process efficiency, as well as on new products and business models.

COMPETITIVE POSITION

In its core markets, pbb Group possesses a local presence and expertise across the entire process chain, providing or having access to real estate experts, property law specialists and financing experts, up to the management of loan exposures. pbb Group actively deploys this local expertise to support clients with international transactions, with key decisions always being taken in Germany.

Strategic portfolios

In Real Estate Finance, pbb's range of services is targeted primarily at professional real estate investors (both national and international) such as real estate companies, institutional investors, real estate funds and – particularly in Germany – also SMEs and clients with a regional focus on Germany. pbb targets complex transactions with medium-sized to larger financing volumes. Financed objects mainly involve office buildings, properties for residential use, retail and logistics properties as well as (business) hotels. Other property types can be financed as portfolio additions. The regional focus is on the core markets eligible for inclusion in Pfandbrief cover in Europe and in certain US metropolitan areas. In this area, pbb offers both local and cross-border financing expertise. A majority of the loans granted are investment financings, i.e. loans for the acquisition or follow-up financing of existing properties generating cash flows. Development financings (including residential real estate developers in Germany) are of less significance.

In Public Investment Finance, pbb finances Pfandbrief-eligible projects for the provision and improvement of public infrastructure. Clients in this segment include regional or provincial governments, municipalities, urban development companies, and publicly-owned hospitals – as well as investment or real estate holding companies. Public/private partnerships and other structured transactions also play a role in this segment, given their close proximity to the REF business. The regional focus in primary new business in on France. In addition to the PIF business in France, this segment also includes, in exceptional cases, long-term publicly guaranteed export financings hedged by public export-credit insurers, so-called Export Credit Agencies. This segment is complemented by bond purchases, including (in particular) for the purposes of managing the cover assets pool and the Group's liquidity. In view of increasingly apparent public-sector reticence regarding (privately financed) infrastructure investments, pbb has decided to refrain from its previous assumption of further growth.

Run-down portfolio

In addition to the portfolios of its two strategic business segments, pbb Group has a non-strategic portfolio, the Value Portfolio (VP). The Value Portfolio consists almost entirely of existing financings to the public sector which are not linked to specific projects (budget financing). The Group does not originate any new business in this area. The portfolio is primarily refinanced at matched maturities. It generates interest income, and matures in accordance with the underlying fixed terms.

The Value Portfolio consists of two sub-portfolios. One sub-portfolio is held within the context of a business model whose objective is both to collect contractual cash flows and to sell financial assets. It allows for opportunistic sales of individual assets. The objective of the business model of the second sub-portfolio is to hold financial assets in order to collect contractual cash flows.

Funding

Loans are largely funded using matching maturities, and primarily via the Pfandbrief market, supplemented with unsecured funding. Issues are regularly placed on the international capital market in the benchmark format, and via private placements. pbb structures private placements as bearer or registered securities in accordance with investors' requirements, or in the form of fixed-rate deposits – meaning that term and interest structure can be negotiated on an individual basis. In line with the lending business, issues are predominantly conducted in euros; pbb prefers to refinance any non-euro lending (especially in the US, the UK and Sweden) directly in the respective currency. This 'natural', matched-currency funding avoids costs for foreign exchange or cross-currency swaps, reducing the need for excess Pfandbrief cover to be funded on an unhedged basis. Residual funding requirements in foreign currency are covered by foreign exchange transactions or cross-currency swaps.

pbb issues Mortgage Pfandbriefe and Public Sector Pfandbriefe, and is one of the largest issuers of Pfandbriefe (measured by outstanding volume). The Pfandbrief market is highly liquid, with a broad investor base (source: Association of German Pfandbrief Banks).

The main vehicles used for unsecured funding are promissory notes, bearer bonds, and fixed-rate deposits. Since the corresponding legal framework has been established in Germany, unsecured funding has been possible – subject to contractual documentation – in 'senior preferred' form, besides the previous 'senior non-preferred' form.

Banks, funds and insurance companies, but also central banks and government funds, are investors in debt instruments. In this segment, pbb Group's particular strategic focus is on further developing its funding franchise, with the objective of further diversifying and expanding its investor base.

In addition, the Bank is active in the retail deposit-taking business with private investors in Germany. Via its online platform (www.pbbdirekt.com) as well as through third-party providers, pbb offers overnight and fixed-term deposits denominated in euros and US dollars. Since August 2017, pbb Group has offered selected fixed-term deposits on an external platform of a third-party provider as well.

STRATEGIC FOCUS

pbb Group's strategy focuses on sustainable business success. Crucial success factors are the assessment and appropriate pricing of credit risk in the lending business on the one hand, and the access to funding markets at adequate terms on the other. Managing the existing portfolio – so as to identify risks at an early stage and mitigate them by taking appropriate measures – is another important factor.

The Management Board has committed itself to further increasing profitability in 2020. Following the continued expansion of sales activities in the US real estate finance market, pbb Group is pursuing various initiatives in order to broaden the value chain as well as its client groups – also within the framework of digitalisation. Furthermore, pbb Group will not only examine opportunities to digitalise its business – especially in the real estate financing segment – but will also constantly review the options available to increase its process and cost efficiencies.

INTERNAL MANAGEMENT SYSTEM

pbb Group's internal management system is pursuing a sustainable enhancement in value of the Group considering aspects of risks and regulatory requirements. The key objective is to achieve a balanced risk/return ratio. Risks should be compatible with external and internal risk-bearing capacity guidelines generating an adequate return on capital.

Monitoring and stearing are based on a consistent and integrated key performance indicator system (KPI system), which assists executives in the management of the Group. The KPI system comprises the dimensions of profitability, growth in the real estate finance portfolio, risk limitation and capital. Regular plan-actual comparisons and related analyses disclose the reasons for any deviations in the key performance indicators. Current market developments, such as the change on interest rate levels, are also displayed. In addition to strategic planning for the Bank as a whole, regular medium-term projections of profitability indicator and (stress) scenario forecasts ensure the management has a comprehensive overview of the Group's future business development

The internal management system has remained unchanged compared to the previous year. The following financial key performance indicators have been defined:

- One key profitability indicator is the return on equity after tax. It is calculated by dividing IFRS net income/loss by the average IFRS equity available in the financial year excluding taccumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI and additional equity instruments (AT1 capital). Profit or loss before tax is a further financial key performance indicator. The aim is to increase it both by generating higher revenues and through strict cost discipline. Cost discipline and efficiency are monitored using the cost-income ratio, i.e. the ratio of general and administrative expenses to operating income.
- The notional amount of the funding in the Real Estate Finance (REF) segment is a significant factor influencing the future earning power and has therefore been redefined as an additional financial key performance indicator. The financing volume can be controlled, above all, by the volume of new business (including prolongations with maturities of more than one year), which also represent a financial key performance indicator. A present value approach is used for managing and calculating new business. Given the changed focus in business activities implemented during the year under review, the nominal volume of financings extended in the Public Investment Finance (PIF) segment, and the associated volume of new business, are no longer used as financial performance indicators.
- pbb Group's capital adequacy process (ICAAP) is based on two approaches concerning risk-bearing capacity: the normative and the economic perspective. Whilst the normative perspective is aimed at the fulfilment of all capital-related legal requirements, supervisory demands and internal objectives, on an ongoing basis, the economic perspective covers all material risks which might threaten the institution's economic viability. Both perspectives are designed to supplement each other, safeguarding pbb Group's ability to survive. The prerequisites for evidencing risk-bearing capacity in the normative perspective are the ongoing compliance with minimum regulatory requirements over a medium-term horizon, plus evidence of adequate internal capital to cover material risks exceeding such minimum requirements. In the economic perspective, risk-bearing capacity is evidenced by sufficient internal capital being available to cover potential present-value losses. Details concerning the methodology used for analysing risk-bearing capacity, and the results obtained, are provided in the Risk and Opportunity Report.
- The CET1 ratio, a key management parameter, is determined on a regular basis; it is calculated by dividing Common Equity Tier 1 (CET1) by risk-weighted assets (RWAs). The Advanced Internal Rating Based Approach (Advanced IRBA) is used to determine regulatory capital requirements for the substantial portion of the real estate portfolio and the credit risk standardised approach (CRSTA) for the remaining portfolio.

Non-financial key performance indicators are not explicitly managed.

NON-FINANCIAL STATEMENT

The chapter “Non-financial Statement” has not been part of the audit carried out by the external auditors.

Companies must assume responsibility for their actions in the environment in which they operate. The key principle of pbb Group’s corporate responsibility philosophy is that of sustainability. This means long-term, responsible actions that take the consequences for all the company’s stakeholders and for the environment into account.

pbb Group is convinced that sustainable and responsible business practices are an essential requirement for securing the future of the Company and increasing its value.

pbb Group goes into those topics and aspects of sustainability which it has identified as being important for the Company in more detail in the Combined Separate Non-Financial Report (see chapter “Non-Financial Report”) according to § 315b-c in connection with § 289b-e HGB which is not part of the Combined Management Report. This has been put together in accordance with the requirements of the CSR Directive Implementation Act and, in addition, will be published via the German Federal Gazette (Bundesanzeiger). The Non-Financial Report has not been audited by the auditors. However, it has been subject to an audit of limited assurance by the external auditing company KPMG AG according to ISAE 3000.

Report on Economic Position

MACROECONOMIC ENVIRONMENT

The global economy grew at a moderate pace in 2019. Economic momentum was unexpectedly sluggish over the course of the year, due in part to increasingly protectionist tendencies and global uncertainties. The trade war between the two largest global economies - the US and China - and political uncertainty concerning the withdrawal of the United Kingdom from the European Union proved to be burdening factors (Source: IMF).

According to the IMF, the industrialised nations grew at a rate of 1.7% in 2019, compared with 2.2% growth in the previous year (Source: IMF). Within that group, however, the pace of growth was unevenly spread. While the US turned in a pleasing performance with the help of loose monetary and fiscal policy, growth was especially disappointing in the euro area and the United Kingdom.

The unequal distribution of the economic momentum in the industrialised nations illustrates the special role that the United States plays. US growth remained solid at 2.3%, despite a certain slowdown, but GDP growth in the euro area and the United Kingdom slowed further to 1.2% and 1.3%, respectively, according to the IMF. In most of the countries, growth was primarily driven by domestic demand, supported by a low unemployment rate: in November 2019 this fell to 7.5% in the euro area, its lowest level in 11 years (Source: Eurostat).

Within the euro area, economic output in Germany is expected to have risen by 0.5% in 2019, following an increase of 1.5% in 2018 (Source: IMF). This was largely due to a decline in production in the manufacturing sector, resulting from uncertainty triggered by the aforementioned global trade conflicts and the exit of the United Kingdom from the EU, which particularly impacted Germany's export-dependent industrial sector. France is estimated to have grown by 1.3%, after 1.7% in 2018 (Source: IMF). Economic growth here was burdened by, among other things, the "yellow vest" protests against the French government and the strikes at the end of the year in response to the government's planned pension reform. Italy is expected to have recorded growth of 0.2%, 0.6 percentage points less than in the previous year (Source: IMF). Political uncertainty generated by the formation of a new coalition government and the conflict between the previous government and the EU Commission regarding the budget deficit are likely to have been particular burdening factors. Spain's economy is expected to have grown by 2.0%, after recording 2.4% growth for 2018 (Source: IMF).

The British economy's growth rates fell slightly over the course of the year. Private demand and investment suffered amidst the uncertainty surrounding the outcome of negotiations with the EU on the withdrawal agreement. Overall, a 2019 growth rate of 1.3% is expected for the UK, unchanged from the previous year (Source: IMF).

pbb's core markets in Northern and Eastern Europe as well as North America continued to grow, albeit at a lower level. 2019's GDP growth rate for Sweden is expected to have been 0.9%. A strong labour market combined with loose monetary and fiscal policy produced 2.3% GDP growth in the US for 2019 (Source: IMF).

The European Central Bank (ECB) loosened its monetary policy and lowered the interest rate on deposits with the central bank to –0.5%, whilst introducing exemptions from negative remuneration at the same time. In the meantime, the bond purchase programme - with a monthly volume of €20 billion - was reinstated, and will be maintained until the inflation target is achieved on a sustainable basis. Nominal terms of the ECB's TLTRO programme were also improved (Source: ECB). During the summer and autumn, the US Federal Reserve (the "Fed") lowered interest rates three times by 25 basis points, as inflation is still expected to remain below its target level of 2% and the Fed anticipates greater risks for global growth (Source: Fed). The Bank of England (BoE) left its benchmark rate unchanged at 0.75%, reflecting a cautious attitude to the terms of the UK's

withdrawal from the EU (Source: BoE). Prices increased by only 1.3% in December 2019, following an increase in inflation to 3% at the start of 2018 (Source: UK Office for National Statistics).

The expansive monetary policy worldwide drove down capital market rates in 2019, both in the US and the UK, as well as in the euro zone. Although yields recovered slightly, following a low at the end of August/beginning of September, they were nonetheless lower than at the start of the year. Ten-year Italian bond yields in particular fell during the year, due to the ECB's loose monetary policy on the one hand and the formation of a more EU-friendly government in Italy on the other (Source: Bloomberg).

On the currency markets, pound sterling gained 6.3% against the euro over the course of the year. The US dollar gained 2.3% against the euro, supported by a significantly stronger economic trend in the US and increased political uncertainty in Europe (Source: Bloomberg).

SECTOR-SPECIFIC ENVIRONMENT

Overall Situation in the Banking Sector

The European banking sector further stabilised its overall capital position in 2019. At the same time, non-performing loans in the EU fell further, from 3.2% of the total portfolio at the end of 2018 to 2.9% in the third quarter of 2019 (Source: European Banking Authority).

However, many banks are still concerned about the operating environment. Profitability is being restrained by fierce competition, particularly in countries with high banking density. Other concerns are lower interest income given the low interest rate environment, weak economic growth and regulatory costs (Sources: Bloomberg, EBA, ECB).

Real Estate Finance

The low interest-rate environment prompted strong demand again in the real estate asset class. Overall economic development and diverse global (geo-) political uncertainties therefore hardly impacted on the demand for commercial real estate. Supported by the investment needs of professional investors and other institutional investors such as insurance companies, investment volumes in 2019 on many real estate markets remained above their long-term historic averages. However, investors will find it increasingly difficult to find high-yielding and stable investment properties, due to the positive investment cycle that has been running for quite some time on the one hand, and the uncertainty among individual investors triggered by topics such as the growth in online retailing (and hence the risk of physical shopping being squeezed out) or the growing debate surrounding the regulation of rental prices for residential construction in big cities on the other. (Sources: Jones Lang LaSalle, BNP Paribas, ECB)

At around €169 billion, real estate transaction volumes in Europe in the first nine months of 2019 were down only 4% on the previous year's level and only 5% lower than the previous record achieved in 2017 (Source: BNP Paribas).

As in previous years, one of the main drivers of this development was the German real estate market, with around €43 billion invested (Source: BNP Paribas). This was driven in particular by the strong demand for office property, which accounted for around 52% of total revenue.

Fundamentally, many investors in Europe and the US simply adhered to their investment strategy, along the lines of the previous year, which led to strong demand for established locations and property types, such as office property. Yields stabilised overall on the markets, even though individual cities reported yield compression (Source: BNP Paribas).

The high transaction volumes generally had a favourable impact on the development of new business amongst financing banks as well as non-bank lenders. Despite the fierce competitive pressure on margins and credit terms, margins stabilised at a low level or even showed a slight sign of improvement in some market segments (Source: VDP).

Public Investment Finance

As the European Commission stated in its autumn forecast, the share of public sector investments in 2018 in the euro area remained at a low level of 2.7% of gross domestic product. Even though the European Commission expected a slight increase for 2019, public sector investments remained well below the level seen before the financial crisis, when the share averaged at 3.2% from 2000 to 2007. However, public-sector investments benefit from the payout of funds under EU funding programmes and the Investment Plan for Europe, which is backed by the European Investment Bank. On the other hand, the EU's fiscal rules and budgetary constraints at local body and regional levels limit the public sector's opportunities to significantly extend expenditure.

Public sector investment in the focus market of France also remained below the average of the pre-financial crisis period (Source: European Economic Forecast).

Value Portfolio

The non-strategic Value Portfolio (VP) segment almost exclusively comprises public budget financing exposures. In 2019, the credit spreads of countries on the European periphery tightened significantly (improved) against the background of the European Central Bank's looser monetary policy. On the basis of this development, selective portfolio adjustments were analysed and carried out to a limited extent (Sources: Bloomberg, ECB).

Funding Markets

The funding markets in 2019 were largely determined by the monetary policy orientation of the central banks as well as ongoing political uncertainties. The ECB's temporary withdrawal from the purchase programme at the start of 2019 caused greater uncertainty among market participants, and was associated with an increase in the refinancing spreads. However, when the ECB resumed its expansive monetary policy, spreads tightened again considerably over the course of the year. Implementation of the agreed ECB measures (a further reduction of the deposit rate, resumption of the purchase programme) in autumn 2019 also led to a noticeable increase in interest rates, prompting more real money investors to return to the market. All in all, more than €26 billion in benchmark Pfandbriefe was placed on the market in the year under review (Sources: ECB, Bloomberg).

German names also issued just under €14 billion in unsecured € benchmark bonds last year, with senior preferred bonds accounting for 60% thereof and senior non-preferred for 40% (Sources: ECB, Bloomberg).

COURSE OF BUSINESS

In the financial year 2019, pbb Group generated a pre-tax profit of €216 million, far surpassing the forecast of between €170 million and €190 million made at the start of the previous year. The subsequent forecast, which was raised on 28 June 2019 as a result of the very good first half-year 2019 and projected profit before taxes at the upper end of the range of €170 million to €190 million or slightly higher, was also clearly exceeded. Profit was ultimately €1 million higher than the renewed forecast of €205 million to €215 million made on 7 November 2019.

The positive development was attributable in particular to net interest income and net income from realisations, both of which exceeded expectations. This impacted on the operating income, and consequently on the cost-income ratio. As a result, the 43.5% cost-income ratio developed better

than the forecast of a slight year-on-year increase (44.2%). Since post-tax profit also exceeded expectations, the return on equity after tax of 5.7% was also above the forecasted range of 3.5% to 4.5%.

At a total of €9.0 billion, the volume of new business from Real Estate Finance (including extensions by more than one year) was within the projected range of between €8.5 billion and €9.5 billion.

The financing volume of the REF segment amounted to an aggregate of €27.1 billion as at the balance sheet date, thereby meeting the forecast, which had predicted a slight year-on-year increase (previous year: €26.8 billion).

Forecasts concerning pbb's risk-bearing capacity at the beginning of 2019 materialised during the course of the year. From a normative perspective, all regulatory minimum ratios were exceeded as at 31 December 2019; available financial resources (after deducting the minimum levels required for regulatory purposes) also covered all further material risks as at the reporting date. From an economic perspective, the capital available to cover the risks also exceeded economic capital requirements as at 31 December 2019.

As at 31 December 2019, the CET1 ratio[1] amounted to 15.2% and, as expected, was significantly above the SREP ratio of 9.125% that banks have had to comply with since the beginning of 2018, in addition to the country-specific (and thus portfolio-specific) variable counter-cyclical capital buffer which, as at 31 December 2019, amounted to 0.34%.

As expected and in accordance with the previous capital markets communications, risk-weighted assets (RWA) increased in the fourth quarter of 2019 to €17.7 billion at the end of the year. The reason for the increase was a higher risk weighting in strategic Commercial Real Estate Finance sub-portfolios, which was oriented on the new provisions set out by the European Banking Authority (EBA) and the Basel IV international banking framework. At the same time, pbb is also addressing the expectations of the capital market to take the pending regulatory changes into account at an early stage while smoothing out cyclical RWA fluctuations at the same time.

Banks use standard approaches as well as internal, IRBA (Internal Rating Based Approach) rating models to determine the RWA. Within the scope of reviewing the internal model in conjunction with the Targeted Review of Internal Models (TRIM), pbb transferred sub-portfolios to the standard approach in the fourth quarter; this mainly concerned loans to public-sector borrowers and financial institutions. In parallel to this, pbb revised the remaining IRBA models for the main portfolios in Commercial real Estate Finance in line with the regulatory requirements, particularly the EBA guidelines. This model revision is expected to be finalised in the course of 2020. The objective is to find a new model environment that significantly reduces the complexity. Targeted new risk weightings in the core portfolio were already taken into account as at 31 December 2019, where a higher calibration was applied to the loss given defaults (LGD). This had the effect of increasing the risk-weighted assets that pbb Group had set at an expected Basel-IV compliant level. Thanks to good capitalisation, the capital ratios also remain well above the regulatory requirements even after these changes were implemented. pbb Group will report RWA and capital ratios on this basis in future.

[1] After confirmation of the 2019 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

DEVELOPMENT IN EARNINGS

Deutsche Pfandbriefbank Group (pbb Group)

With pre-tax profit of €216 million, pbb group repeated the previous year's good result (2018: €215 million), whereby the positive performance of operating income compensated for the higher loss allowance. Net income from realisations in particular was higher in operating income. The most important earnings component, net interest income, also improved once again. A detailed breakdown of the results is provided below:

pbb Group		2019	2018
Operating performance			
Operating income	in € million	506	471
Net interest income	in € million	458	450
Net fee and commission income	in € million	6	6
Net income from financial instruments at fair value through profit or loss (Net income from fair value measurement)[1]	in € million	-7	-9
Net income from realisations	in € million	48	32
thereof: from financial assets at amortised cost	in € million	49	31
Net income from hedge accounting	in € million	-2	-1
Net other operating income	in € million	3	-7
Net income from allowances on financial assets (Net income from risk provisioning)[1]	in € million	-49	-14
General and administrative expenses	in € million	-202	-193
Expenses from bank levies and similar dues	in € million	-24	-25
Net income from write-downs and write-ups of non-financial assets	in € million	-18	-15
Net income from restructuring	in € million	3	-9
Profit before tax	**in € million**	**216**	**215**
Income tax	in € million	-37	-36
Net income	**in € million**	**179**	**179**
Key ratios			
Earnings per share (basic and diluted)[2]	in €	1.20	1.24
Cost-income ratio	in %	43.5	44.2
Return on equity before tex	in %	6.9	7.1
Return on equity after tax	in %	5.7	5.9

[1] Solely the condensed and parenthesised line item descriptions are used subsequently.
[2] For calculation see note "Earnings per share"

Net interest income of €458 million was slightly higher than the previous year's figure (2018: €450 million), reflecting an increase of the number of loans granted and hence in interest-bearing loans. The increase in the average volume of strategic real estate financings (€27.4 billion compared to €25.8 billion in 2018) more than offset the strategic decline in the Value Portfolio. The overall bank margin increased slightly, reflecting the stronger weighting in favour of real estate financing and maturities of higher-yielding liabilities. As in the previous year, net interest income generated from investing free liquidity and own funds was burdened by the negative interest rate environment. However, it benefited from income from floors in the client business.

Net fee and commission income from non-accruable fees was unchanged from the previous year at €6 million (2018: €6 million).

Net income from fair value measurement totalled €-7 million (2018: €-9 million). The increases in value here were due in particular to non-derivative financial instruments, which are required to be accounted for at fair value in accordance with IFRS 9. Income was burdened by expenses incurred from the gradual convergence of the positive fair value of the derivatives towards zero with as maturity reduces (pull-to-par effect). This expense was partially offset by credit and interest-driven increases in value.

Net income from realisations rose to €48 million (2018: €32 million). This increase was due to higher early termination fees, which amounted to €39 million in the period under review (2018: €16 million). This position also includes reversals of fees not yet received due to the early derecognition of financial instruments of €11 million (2018: €10 million). An expense of €1 million each was incurred from the redemption of liabilities (2018: income of €6 million) and from the sale of securities (2018: income of €1 million).

Net income from hedge accounting amounted to €-2million (2018: €-1 million). Hedges were largely effective, thanks to close monitoring and management of interest rate risk.

Net other operating income of €3 million (2018: €-7 million) was affected by reversals of provisions, for example as a result of the positive development of legal risks.

Net additions to loss allowance amounted to €49 million (2018: €14 million). The increase was primarily attributable to non-credit-impaired financial instruments, for which impairment losses are determined using a model. Net additions to loss allowance for stage 1 and 2 financial instruments amounted to €16 million (2018: net reversals of €9 million). The increase resulted from two accounting-related changes in estimates. Firstly, in order to determine the expected credit loss for stage 1 and 2 impairments, pbb Group has given a heavier weighting to the probability of an economic downturn and declining real estate market values compared to the previous year, due to downgraded macroeconomic and sector-specific forecasts and increasing global risks, which led to an increase in impairments of €20 million. Secondly, stage 1 and 2 impairments increased by €11 million as a result of additions to the loss database, partly due to the change in the regulatory definition of default and the fact that a longer time period was taken into account. Among other things, the additional data resulted in an adjustment (recalibration) of the models used to determine probability of default (PD) and loss given default (LGD). These regulatory parameters influence expected credit losses, adjusted to meet IFRS 9 requirements. Apart from the accounting-related changes in estimates, there were reversals of impairments for non-credit-impaired financial assets, as a result of lower default probabilities and default loss rates. These assets were mainly pertaining to certain Southern European counterparties, early loan repayments and shortened remaining terms. Additions to stage 3 impairments of €33 million (2018: €19 million) related essentially to financings of shopping centres in the UK, while there were only minor reversals for financings with impaired credit ratings in other regions. Moreover, additions to provisions for unconditional loan commitments of €1 million (2018: €5 million) were offset by €1 million (2018: €1 million) in income from amounts recovered on loans and advances previously written off.

General and administrative expenses of €202 million were slightly above the same period of the previous year (€193 million). This was due to non-personnel expenses, which rose partly due to the costs of implementing new regulatory requirements.

Expenses for bank levies and similar duties of €24 million (2018: €25 million) mainly comprised expenses for the bank levy; taking into account pledged collateral of €20 million (2018: €21 million), this amounted to 15%. The item also includes expenses of €4 million (2018: €4 million) for the private Joint Fund for Securing Customer Deposits and the statutory deposit guarantee scheme.

Net income from write-downs and write-ups of non-financial assets of €-18 million (2018: €-15 million) included scheduled depreciations of tangible assets and amortisation of intangible assets. The year-on-year increase resulted from write-downs on rights of use under leases, to be reported in accordance with IFRS 16. IFRS 16 was applied with a modified retrospective effect in the reporting period, based on the transitional provisions as defined in the standard. Figures for the same period of the previous year remain unchanged.

Net income from restructuring of €3 million (2018: €-9 million) included income from the reversal of provisions related to human resources. The reversals were largely made possible due to some employees from the structured areas transferring to other areas in the Group. Additions were made to restructuring provisions in the previous year relating to reorganisation of business activities in Public Investment Finance and the centralisation of infrastructure tasks.

Income taxes of €-37 million (2018: €-36 million) resulted from a current tax expense of €22 million (2018: expense of €35 million) and deferred tax expenses of €15 million (2018: expenses of €1 million). The changes were due to the tax authorities' amendments to the tax treatment of a large-volume, multi-year transaction.

Profit after tax amounted to €179 million (2018: €179 million), of which €162 million (2018: €167 million) was attributable to ordinary shareholders and €17 million (2018: €12 million) at AT1 investors.

Operating Segments

Segment reporting is based on management reporting results. More information on this can be found in the note on “Notes to Segment Reporting by Operating Segment”. The development of the RWA in the segments and allocation of equity is described here.

REAL ESTATE FINANCE (REF)

The REF business segment comprises financing for professional real estate investors. The volume of new business (including extensions by more than one year) totalled €9.0 billion (2018: €9.5 billion). As forecast at the start of 2019, the REF segment made the largest contribution by far to the overall result.

Real Estate Finance		2019	2018
Operating performance			
Operating income	in € million	433	391
Net interest income	in € million	385	372
Net fee and commission income	in € million	7	6
Net income from fair value measurement	in € million	-8	-8
Net income from realisations	in € million	48	27
Net income from hedge accounting	in € million	-1	-1
Net other operating income	in € million	2	-5
Net income from risk provisioning	in € million	-57	-22
General and administrative expenses	in € million	-164	-154
Expenses from bank levies and similar dues	in € million	-14	-14
Net income from write-downs and write-ups of non-financial assets	in € million	-15	-12
Net income from restructuring	in € million	3	-7
Profit before tax	**in € million**	**186**	**182**
Key ratios			
Cost-income ratio	in %	41.3	42.5
Balance-sheet-related measures		**31.12.2019**	**31.12.2018**
Financing volumes	in € billion	27.1	26.8
Risk-weighted assets[1]	in € billion	15.8	8.3
Equity[2]	in € billion	1.5	1.4

[1] Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.
[2] Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI and additional equity instruments (AT1 capital).

Net interest income of €385 million (2018: €372 million) benefited from the increase in the average financing volume, to reach €27.4 billion (2018: €25.8 billion). In line with pbb Group's development, net interest income generated from investing free liquidity and own funds was burdened by the negative interest rate environment. However, it benefited from income from floors in the client business. Net income from fair value measurement primarily included allocated matters. The increase in net income from realisations was due to higher early termination fees and reversals of fees not yet received due to the early derecognition of financial instruments.

Net income from risk provisioning amounted to €-57 million (2018: €-22 million). The increase was primarily attributable to non-credit-impaired financial instruments, for which impairment losses are determined using a model. On the one hand, in order to determine the expected credit loss for stage 1 and 2 impairments, pbb Group has given a heavier weighting to the probability of an economic downturn and declining real estate market values compared to the previous year, due to downgraded macroeconomic and sector-specific forecasts and increasing global risks. On the other hand, stage 1 and 2 impairments increased as a result of additions to the loss database, partly due to the change in the regulatory definition of default and the fact that a longer time period was taken into account. Among other things, the additional data resulted in an adjustment (recalibration) of the models used to determine probability of default (PD) and loss given default (LGD). These regulatory parameters influence expected credit losses, adjusted to meet IFRS 9 requirements. Apart from these effects, there were reversals of impairments for non-credit-impaired financial assets, as a result of early loan repayments, among other things. Additions to stage 3 impairments related to financings of shopping centres in the UK.

General and administrative expenses rose to €164 million (2018: €154 million) as a result of higher allocated costs for implementing new regulatory requirements.

Expenses from bank levies and similar dues, which were unchanged at €14 million, including in particular the allocated bank levy taking into account 15% pledged collateral.

Scheduled depreciation of tangible assets and amortisation of intangible assets (rights of use under leases, to be reported in accordance with IFRS 16 for the first time in 2019) culminated in net income from write-downs and write-ups of non-financial assets of €-15 million (2018: €-12 million).

PUBLIC INVESTMENT FINANCE (PIF)

The PIF business segment comprises financing extended primarily for the provision of public infrastructure. The volume of new business amounted to €0.3 billion (2018: €1.0 billion). Profit before tax was €4 million (2018: €8 million) and was therefore in line with expectations.

Public Investment Finance		**2019**	**2018**
Operating performance			
Operating income	in € million	34	38
Net interest income	in € million	35	34
Net fee and commission income	in € million	-	1
Net income from fair value measurement	in € million	-2	-2
Net income from realisations	in € million	1	5
Net income from hedge accounting	in € million	-	-
Net other operating income	in € million	-	-
Net income from risk provisioning	in € million	-	4
General and administrative expenses	in € million	-25	-27
Expenses from bank levies and similar dues	in € million	-3	-4
Net income from write-downs and write-ups of non-financial assets	in € million	-2	-2
Net income from restructuring	in € million	-	-1
Profit before tax	**in € million**	**4**	**8**
Key ratios			
Cost-income ratio	in %	79.4	76.3
Balance-sheet-related measures		**31.12.2019**	**31.12.2018**
Financing volumes	in € billion	6.3	6.4
Risk-weighted assets[1]	in € billion	0.8	1.4
Equity[2]	in € billion	0.1	0.1

[1] Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.
[2] Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI and additional equity instruments (AT1 capital).

Although the average financing volume declined to €6.4 billion (2018: €6.7 billion), net interest income was up slightly on the same period of the previous year at €35 million (2018: €34 million) due to the higher average margin.

Contrary to pbb Group's overall development, general and administrative expenses in PIF fell slightly to €25 million (2018: €27 million), reflecting the business restructuring that was initiated in 2018. pbb Group had distanced itself in the previous year from the strategic growth assumption, resolving instead to continue to manage the portfolio on a "hold" basis while restructuring the business at the same time.

VALUE PORTFOLIO (VP)

The Value Portfolio (VP) operating segment includes pbb Group's non-strategic portfolios and activities, and is being reduced in line with pbb's strategy. Buoyed by the good net interest income and positive net income from risk provisioning, profit before tax of €17 million (2018: €20 million) made a greater than expected contribution to overall result.

Value Portfolio		2019	2018
Operating performance			
Operating income	in € million	34	37
Net interest income	in € million	33	39
Net fee and commission income	in € million	-1	-1
Net income from fair value measurement	in € million	3	1
Net income from realisations	in € million	-1	-
Net income from hedge accounting	in € million	-1	-
Net other operating income	in € million	1	-2
Net income from risk provisioning	in € million	8	4
General and administrative expenses	in € million	-13	-12
Expenses from bank levies and similar dues	in € million	-7	-7
Net income from write-downs and write-ups of non-financial assets	in € million	-1	-1
Net income from restructuring	in € million	-	-1
Profit before tax	**in € million**	**21**	**20**
Key ratios			
Cost-income ratio	in %	41.2	35.1
Balance-sheet-related measures		**31.12.2019**	**31.12.2018**
Financing volumes	in € billion	12.1	13.2
Risk-weighted assets[1]	in € billion	0.5	4.0
Equity[2]	in € billion	0.8	1.1

[1] Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.
[2] Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI and additional equity instruments (AT1 capital).

Net interest income declined to €33 million (2018: €39 million), in line with the strategic decline in the average financing volume to €12.6 billion (2018: €13.5 billion). Net income from fair value measurement benefited from lower credit spreads of non-derivative financial assets measured at fair value through profit or loss.

Net income from risk provisioning of €8 million (2018: €4 million) benefited in particular from lower default probabilities and LGDs, especially for specific southern European counterparties and from the reduction of impairments due to the lower remaining terms to maturity in the portfolio.

CONSOLIDATION & ADJUSTMENTS (C&A)

C&A reconciles the segment results with the consolidated result. Besides consolidation adjustments, this includes certain income and expense items outside the operating segments' responsibility.

Consolidation & Adjustments		2019	2018
Operating performance			
Operating income	in € million	5	5
Net interest income	in € million	5	5
Net fee and commission income	in € million	-	-
Net income from fair value measurement	in € million	-	-
Net income from realisations	in € million	-	-
Net income from hedge accounting	in € million	-	-
Net other operating income	in € million	-	-
Net income from risk provisioning	in € million	-	-
General and administrative expenses	in € million	-	-
Expenses from bank levies and similar dues	in € million	-	-
Net income from write-downs and write-ups of non-financial assets	in € million	-	-
Net income from restructuring	in € million	-	-
Profit before tax	**in € million**	**5**	**5**
Balance-sheet-related measures		**31.12.2019**	**31.12.2018**
Risk-weighted assets[1]	in € billion	0.6	0.9
Equity[2]	in € billion	0.5	0.3

[1] Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.
[2] Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI and additional equity instruments (AT1 capital).

Net interest income was the only income item and arose from the investment of equity allocated to C&A.

DEVELOPMENT IN ASSETS

Assets

in € million	31.12.2019	31.12.2018
Cash reserve	1,141	1,388
Financial assets at fair value through profit or loss	1,306	1,659
Positive fair values of stand-alone derivatives	717	749
Debt securities	130	258
Loans and advances to customers	456	649
Other financial assets at fair value through profit or loss	3	3
Financial assets at fair value through other comprehensive income	1,696	1,984
Debt securities	1,325	1,564
Loans and advances to other banks	15	16
Loans and advances to customers	356	404
Financial assets at amortised cost after credit loss allowances	50,224	50,341
Financial assets at amortised cost before credit loss allowances	50,351	50,453
Debt securities	7,679	8,039
Loans and advances to other banks	2,356	2,231
Loans and advances to customers	40,316	40,183
Credit loss allowances on financial assets at amortised cost	-127	-112
Positive fair values of hedge accounting derivatives	2,199	2,207
Valuation adjustment from porfolio hedge accounting (assets)	19	2
Tangible assets	45	4
Intangible assets	39	37
Other assets	41	35
Current income tax assets	22	26
Deferred income tax assets	90	86
Total assets	**56,822**	**57,769**

General Development in Assets

Total assets declined by €1.0 billion to €56.8 billion in the year under review. The slight decline was attributable in particular to somewhat lower financial assets at fair value through profit and loss and other comprehensive income. This was due to disposals, as well as syndications and maturities. Financial assets measured at amortised cost include commercial real estate finance, whose notional volume increased slightly in line with the strategy to €27.1 billion (2018: €26.8 billion), whereby the volume of the non-strategic portfolio declined. Tangible assets increased due to the activation of the right of use for pbb's newly acquired, leased corporate headquarters in Garching in accordance with IFRS 16.

Investments

Additions to intangible assets amounted to €14 million during the year under review (2018: €13 million). Services rendered by third parties were used for internally developed software. These investments covered all segments of pbb Group.

DEVELOPMENT IN FINANCIAL POSITION

Liabilities and equity

in € million	31.12.2019	31.12.2018
Financial liabilities at fair value through profit or loss	762	881
Negative fair values of stand-alone derivatives	762	881
Financial liabilities measured at amortised cost	49,741	50,714
Liabilities to other banks	4,195	3,867
Liabilities to customers	23,985	24,901
Bearer bonds	20,858	21,237
Subordinated liabilities	703	709
Negative fair values of hedge accounting derivatives	2,562	2,538
Valuation adjustment from porfolio hedge accounting (liabilities)	81	23
Provisions	263	268
Other liabilities	130	40
Current income tax liabilities	47	48
Liabilities	**53,586**	**54,512**
Equity attributable to the shareholders of pbb	2,938	2,959
Subscribed capital	380	380
Additional paid-in capital	1,637	1,637
Retained earnings[1)]	966	939
Accumulated other comprehensive income	-45	3
from pension commitments	-99	-73
from cash flow hedge accounting	-11	-
from financial assets at fair value trough other comprehensive income	65	76
Additional equity instruments (AT1)	298	298
Equity	**3,236**	**3,257**
Total equity and liabilities	**56,822**	**57,769**

[1)] Adjusted according to IAS 8.14. Details are disclosed in note “Consistency”.

Liabilities

The decline in liabilities was mainly due to maturing liabilities measured at amortised cost. In other liabilities, lease liabilities for pbb’s newly acquired, leased corporate headquarters in Garching increased in accordance with IFRS 16. The amount of the provisions remained virtually constant, as the higher provisions for pensions and other employee benefits resulting from the lower discount rate were largely offset by utilisation and reversals for other provisions.

Equity

The changes in equity are presented in the “Equity” note.

The Management Board and Supervisory Board will propose to the Annual General Meeting on 28 May 2020 to distribute a dividend of €0.90 per share entitled to dividends.

Key Regulatory Capital Ratios (fully phased-in)[1]

At the balance sheet date, the CET1 ratio amounted to 15.2% (31 December 2018: 18.5%), the own funds ratio to 20.4% (31 December 2018: 24.9%) and the leverage ratio to 5.4% (31 December 2018: 5.3%). Please refer to the Risk and Opportunity Report (“Internal Capital Adequacy Assessment Process (ICAAP)” section) for further information on the key regulatory capital ratios.

[1] After confirmation of the 2019 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

Liquidity

Principles and Objectives of Liquidity and Financial Management

The primary objective of pbb Group's liquidity and financial management is to secure and manage the liquidity of pbb and its subsidiaries in such a way that their financing and funding capabilities are assured at all times. Central liquidity management is carried out by raising and investing liquidity on the money and capital markets and on the interbank money market as well as central banks.

Liquidity management within pbb Group is performed centrally by pbb's Treasury division. The sales units are refinanced internally on a one-to-one basis when they enter into new business. This means that risks are bundled and centrally managed.

Asset/liability management for pbb Group is performed by the Group Asset and Liability Committee (ALCO). The maturity structure can be found in the note on "Remaining terms of certain financial assets and liabilities."

Liquidity Ratio

Since 1 January 2018, a minimum liquidity coverage ratio (LCR) of 100% has been mandatory in regulatory liquidity reporting. As at 31 December 2019 the LCR was 182% (31 December 2018: 212%).

Funding

During the 2019 financial year, pbb Group raised new long-term funding in the amount of €6.7 billion (2018: €5.5 billion). This was offset by repurchases and terminations which amounted to €0.6 billion (2018: €0.3 billion). The total amount of funding comprises both Pfandbrief issues and unsecured liabilities, issued both in the form of benchmark bonds and private placements. At €3.1 billion (2018: €3.6 billion), Pfandbrief issues accounted for just under half of the volume. Unsecured funding accounted for €3.6 billion (2018: €1.6 billion), with almost all of the volume being issued as senior preferred bonds (2018: €0.2 billion). A further €0.3 billion in additional equity (AT1 capital) was issued in the previous year. Most transactions were denominated in euro, and were placed as fixed-rate bonds. Unhedged interest rate exposures were usually hedged by swapping fixed against floating interest rates. In order to minimise foreign currency risk between assets and liabilities, bonds equivalent of €1.6 billion were issued in USD, GBP, SEK and CHF.

Ratings

The following table shows the senior unsecured ratings and Pfandbrief ratings, mandated by pbb, as at 31 December 2019:

Senior unsecured ratings and ratings for Pfandbriefe of Deutsche Pfandbriefbank AG (pbb)[1]

	31.12.2019		31.12.2018	
	Standard & Poor's	Moody's	Standard & Poor's	Moody's
Long-term issuer rating/outlook	A-/Negativ	-	A-/Negativ	-
Short-term issuer rating	A-2	-	A-2	-
Long-term "preferred" senior unsecured debt rating2[)]	A-	-	A-	-
Long-term "non-preferred" senior unse-cured debt rating3[)]	BBB-	-	BBB-	-
Public Sector Pfandbriefe	-	Aa1	-	Aa1
Mortgage Pfandbriefe	-	Aa1	-	Aa1

[1)] This overview does not include all ratings/outlooks.
[2)] Senior unsecured debt".
[3)] "Senior subordinated debt".

Rating agencies may alter or withdraw their ratings at any time. Ratings of individual securities issued by pbb may deviate from the ratings indicated above, or not be rated at all. For the evaluation and usage of ratings, please refer to the rating agencies' pertinent criteria and explanations. The relevant terms of use are to be considered. Ratings should not serve as a substitute for personal analysis. They do not constitute a recommendation to purchase, sell or hold securities issued by pbb.

During 2019 the ratings mandated by pbb remained unchanged.

On 18 September 2019, Standard & Poor's confirmed the Bank's ratings and the negative rating outlook. In addition to factors such as the maintenance of capitalisation, asset quality and risk-adjusted earnings, the agency's negative rating outlook is since based on deteriorating trends in the German banking sector ("Industry Risk") as well as the economic environment in which banks are operating in Germany ("Economic Risk"). Standard & Poor's assesses these factors in the context of the so-called Banking Industry Country Risk Assessment ("BICRA") which is factored into the assigned ratings on a regular basis.

Ongoing changes to the regulatory and economic environment, as well as possible distortions (including those related to the United Kingdom's exit from the European Union) may lead to rating pressure going forward.

Off-balance sheet commitments

Irrevocable loan commitments of €4,175 million as at the balance sheet date (31 December 2018: €4,731 million) represent the majority of off-balance sheet commitments. Contingent liabilities on guarantees and warranties amounted to €191 million as at 31 December 2019 (31 December 2018: €76 million). In addition, cash collateral relating to irrevocable payment obligations to the German Federal Agency for Financial Market Stabilisation (Finanzmarktstabilisierungsanstalt) resulting from the bank levy, to the deposit protection fund and to the compensation scheme of German banks totalling €25 million (31 December 2018: €20 million) was pledged.

MATERIAL RELATED PARTY TRANSACTIONS

No material transactions with related parties were entered into during the financial years 2019 and 2018. Please refer to the note on "Relationships with Related Parties" for more details.

SUMMARY

Due to the good net interest income and net income from realisations, pbb Group generated profit before tax of €216 million in the financial year 2019, well above the range of €170 million to €190 million projected at the beginning of 2019.

The average financing volume in the Real Estate Finance segment was further boosted in a competitive market environment compared with the previous year, though repayments remained high due to the low market interest levels.

Risk and Opportunity Report

The Risk and Opportunity Report shows the identified risks and the opportunities for the individual risk types within the framework of the implemented risk management and risk controlling system. For more general or bank-wide risks and opportunities, please refer to the Report on Expected Developments.

ORGANISATION AND PRINCIPLES OF RISK AND CAPITAL MANAGEMENT

pbb Group had implemented a Group-wide risk management and risk control system, which provides for uniform risk identification, measurement and limitation in accordance with section 91 (2) of the German Public Limited Companies Act (AktG) and section 25a of the German Banking Act (Kreditwesengesetz – "KWG"). pbb, at a single-entity level, applies an exemption according to section 2a (2) of the KWG. The exemption refers to the requirements concerning the risk control function pursuant to section 25a (1) sentence 3 nos. 1, 2, 3b and 3c of the KWG.

Organisational changes relating to the Chief Risk Officer function took effect as at 1 January 2019. The tasks that were performed temporarily by the Risk Management Projects unit are now once again the responsibility of CRM REF. With Mr Schulte joining the Management Board, a new area of responsibility was also created, bundling responsibility for Treasury, Portfolio Analysis and Property Analysis & Valuation (the latter having been the responsibility of the CRO up until that point). Furthermore, the CRM REF and CRM PIF units were merged in the year under review. Since 1 October 2019, the Compliance department – which was previously allocated to the CEO/CFO function – has been reporting to the CRO function.

Organisation and Committees

The Management Board of pbb is responsible for the risk management system, and decides on the strategies and material issues of risk management and risk organisation at pbb Group.

The principles, methods and processes of pbb Group's risk management system are specified centrally by pbb's Risk Management and Controlling, and are applied throughout pbb Group, subject to any special requirements at single-entity level. The risk management system comprises the plausible and systematic identification, analysis, valuation, management, documentation, monitoring and communication of all major risks.

The following are major components of the risk management system in the responsibility of the Management Board:
- Defining, updating and communicating business and risk strategies as the basis of business activities and risk acceptance within pbb Group
- Defining and improving organisation structures within pbb Group and in particular for risk management, which ensures that all major risks of pbb Group are managed and monitored
- Adopting credit competences as a decision-making framework along the credit processes within pbb Group
- Taking decisions regarding (portfolio) management measures outside the delegated competences

The Management Board notifies the Supervisory Board with regard to significant changes in the business and risk strategies as well as the risk profile of pbb Group. The Risk Management and Liquidity Strategy Committee (RLA) of the Supervisory Board is mainly responsible for controlling the overall risk situation and for monitoring, establishing and improving an efficient risk management system, and is also responsible for the liquidity management and assurance of pbb Group and resolves upon necessary credit approvals for credit decisions. The Management Board notifies this

committee of all increases to specific allowances and the creation of new specific allowances in excess of €5 million and also notifies this committee at regular intervals of major exposures with higher levels of risk.

The committees detailed in the following have been set up at pbb Group level with the involvement of the respective decision-makers.

The **Risk Committee (RC)**, consists of the CRO (Chairman), the CEO/CFO (Deputy Chairperson), the Chief Credit Officer (CCO), the Head of Risk Management & Control (RMC) and one CRM department head. In general, the committee meets on a monthly basis and discusses the risk development, adopts guidelines/policies, methods for risk measurement, the related parameters as well as methods of monitoring for all risk types. The RC is responsible for the development of standard guidelines of risk management and risk controlling across the Group and also monitors the development of the risk-bearing capacity, economic capital, available financial resources as well as the credit portfolio and the compliance with limits. The Risk Committee discusses the portfolio developments of pbb Group. Additional sub-committees have been established below the Risk Committee, as outlined below.

The **Credit Committee** is chaired by the CRO or the CCO (with delegation opportunities to a Senior Credit Executive). As a general rule, the committee meets at least once a week and takes credit decisions on new business, prolongations and material changes that fall within the scope of its authority. It also votes on all credit decisions which are in the responsibility of the Management Board or which have to be approved by the Risk Management and Liquidity Strategy Committee. It is in the responsibility of the relevant decision-makers to ensure that the credit decisions are consistent with the prevailing business and risk strategy.

The **Watchlist Committee** is chaired by the CCO (who may delegate this task to a nominated representative with voting rights in the Credit Committee ('B' vote)) and meets every month. All exposures identified by the early warning system are discussed and, if appropriate, individual measures are decided there; these measures have to be subsequently implemented by the relevant departments. Where necessary, the committee takes decisions regarding the need to transfer exposures to CRM REF Workout, which then takes the necessary steps for restructuring or workout on the basis of an individual exposure strategy. It is the duty of responsible authorised persons to take all necessary credit decisions in accordance with the lending authority regulations, or to initiate a decision by the Credit Committee.

If there are indicators for an impairment of an exposure's credit rating (impairment stage 3) in accordance with IFRS 9, the result – after determining the extent of any such impairment – is presented to the **Risk Provisioning Committee (RPC)**. It is chaired by the CRO. The RPC decides upon recognition, charge-off and reversals of loan loss provisions, within the scope of a pre-defined assignment of approval powers and in accordance with IFRS and the German Commercial Code (HGB); where the RPC cannot take a final decision, it issues a recommendation. Finally, the RPC decides upon any foreclosures which may be necessary. The recommendations made by the committee form the basis of decisions to be made in line with the relevant set of rules governing powers.

The **New Product Process Committee (NPPC)** comprises representatives from the most important units reponsible for infrastructure and controls. The representatives are determined by the RC. The NPPC convenes on an event-driven basis; it is responsible to ensure that, before business commences with new products or in new markets, the resulting risks as well as the related impact on processes, controls and infrastructure are systematically analysed and duly addressed. Only after approval of new product process committee business with new products or in new markets can be started.

The **Stress Test Committee** is responsible for the methodology, performance and monitoring of the internal stress tests. It is chaired by the CRO. The Committee also contributes to the preparation of scenarios for the Recovery Plan which every bank is required by law to prepare.

Besides the Risk Committee, there are the **Asset and Liability Committee (ALCO)** as well as the **Legal and Regulatory Risk Committee (LRRC)**. The tasks of the ALCO are: managing liquidity as well as pbb Group's balance sheet structure, defining long-term financing strategies, managing capital, regulatory capital ratios, as well as market risk exposure. The LRRC advises on legal and regulatory requirements, and may assign responsibility for implementation to business divisions, following consultation. The **Outsourcing Committee** deals with the implementation of regulatory and statutory requirements as well as preparation of, and compliance with, internal guidelines. Moreover, it handles the overall management and monitoring of outsourced activities.

Organisation of Risk Management
31 Dezember 2019

<table>
<tr><td colspan="8">Risk Management and Liquidity Strategy Committee (RLA) of the Supervisory Board</td></tr>
<tr><td colspan="8">Management Board</td></tr>
<tr><td colspan="5">Risk Committee (RC)</td><td rowspan="2">Asset and Liability Committee (ALCO)</td><td rowspan="2">Legal and Regulatory Risk Committee[1] (LRRC)</td><td rowspan="2">Outsourcing Committee (OC)</td></tr>
<tr><td>Credit Committee</td><td>Watchlist Committee</td><td>Risk Provisioning Committee</td><td>New Product Process Committee</td><td>Stress Test Committee</td></tr>
</table>

[1] Reporting via Compliance.

Chief Risk Officer (CRO) In addition to the above-mentioned committees, the following organisation units of the CRO, form an integral part of the risk management system of pbb Group:

Organisation of Chief Risk Officer (CRO)
31 Dezember 2019

<table>
<tr><td colspan="4">Chief Risk Officer (CRO)</td></tr>
<tr><td>Risk Management & Control (RMC)</td><td>Credit Risk Management (CRM)</td><td>Operations</td><td>Compliance</td></tr>
</table>

The organisation of the CRO function comprises the following monitoring and back-office units at pbb Group level:

- The unit **Risk Management & Control**, which is amongst others responsible for monitoring market, credit, operational and liquidity risks as well as the risk-bearing capacity of pbb Group and which is also responsible for Group-wide uniform risk measuring methods and risk reports.
- The unit of the **Chief Credit Officer** of pbb Group, which is responsible for the analysis of new business and portfolio management. In addition, CRM REF also comprises the Workout (Real Estate) unit, which is responsible for the recovery and workout of all critical exposures, and the central unit Credit Processes, which is responsible in particular for the organisation of the Credit Committee and implementation of regulatory requirements in the credit processes. The CRM REF and CRM PIF units were merged in the year under review.

- The unit **Operations**, which is responsible for the global servicing and administration of the loan portfolio (including technical implementation of loan agreements), settlement of capital markets transactions, administration and processing of the Group's securities and derivatives portfolios, as well for handling domestic and international payments.
- The unit **Compliance**, has amongst others established checking and reporting processes with regard to money laundering, sanctions, embargos and other criminal acts, as well as for other Compliance topics. In addition, the Compliance function is responsible for counteracting any risks arising from non-compliance with legal rules and requirements. Compliance is responsible for the central coordination of key controls within the framework of the Internal Control System. Compliance is also represented in various committees. Since 1 October 2019, the Compliance department – which was previously allocated to the CEO/CFO function – has been reporting to the CRO function.

In addition to the CRO function, the independent Property Analysis & Valuation (PAV) department and Group Internal Audit units complement the pbb Group's risk management system. PAV is responsible for the analysis and uniform valuation of properties serving as collateral, using market valuation and loan-to-value methods, as well as for the monitoring of financed developments. The area of responsibility of Group Internal Audit comprises risk-oriented regular as well as event-driven audits of processes, controls and systems. This also includes the revision of the risk management system.

Risk Strategy and -Policies

Together with pbb's business strategy, the risk strategy forms the foundation for pbb Group's planning. The risk strategy has been defined on the basis of the Group-wide risk tolerance; it reflects pbb Group's strategic direction as a specialist for real estate finance and public investment finance with a focus on Pfandbrief funding. Moreover, the risk strategy defines the guidelines which form the basis of the risk culture for pbb Group. Subject to any special requirements at single-entity level, the risk strategy is applicable for pbb Group's operating segments and legal entities. It is reviewed and updated at least annually.

As part of the annual strategy development process, the risk strategy for 2019 was drawn up, adopted by the Management Board and approved by the Supervisory Board. Material changes compared to the previous year were made in the form of adjustments to the ICAAP management approach, and updates of individual risk types in accordance with the risk inventory. At the beginning of August 2019, the Risk Strategy was further updated on account of the IRRBB requirements to be implemented within market risk.

The risk strategy is enshrined in the operative business via risk policies for the individual operating segments, as well as frameworks, guidelines or instructions for all major risk types set out in the valid risk inventory. The individual policies are reviewed and updated regularly if necessary. They contain information on risk measurement, risk monitoring and risk management. The limit-setting process – as well as the escalation process if a limit is exceeded – are also described in the policies.

Risk Reporting

Risk reporting reflects the structure of the operating segments. The Management Board of pbb receives regular risk reports which include an extensive overview as well as detailed information concerning the risk situation for each risk type as well as other management-relevant information. The supervisory bodies are also notified of risk-relevant issues at regular intervals. In addition, special reports are prepared on an ad hoc basis or at the request of the Management Board or Supervisory Board; such special reports consider specific and acute risk issues, for instance in relation to critical markets, products or counterparties.

Risk Quantification and Risk Management

For the purposes of systematically identifying and analysing potential risks arising from the business model or pbb Group's external environment, the Group carries out a comprehensive risk inventory at least once a year. The objective of this risk inventory is to establish a full risk profile which identifies any and all risks, provides an assessment as to whether these risks are material for the capitalisation and liquidity status of pbb Group, and scans them for the existence of potential risk concentrations. Where possible, risks are quantified using applicable risk models or other methods.

Risks which cannot be quantified (or only in part) are monitored and managed using dedicated capital buffers or separate management tools, as well as by way of regular, detailed reports and clearly-defined requirements such as the Compliance and Corporate Governance guidelines.

pbb Group's approach to managing risk, capital and liquidity is based on the Internal Capital Adequacy Assessment Process (ICAAP) and the Internal Liquidity Adequacy Assessment Process (ILAAP), each of which is seen in a normative and an economic perspective. The normative perspective is geared towards ongoing fulfilment of all of the Bank's capital- and liquidity-related legal requirements and supervisory demands, as well as to the achievement of internal objectives. The economic perspective covers all material risks which might threaten pbb Group's economic viability, with a focus on the present-value analysis of risks.

Besides the measurement, limitation and monitoring of risks, all risk management approaches also comprise regular reporting as well as escalation processes; they are supplemented by scenario analyses and stress testing. Within the framework of these strategic management approaches, pbb Group defines its risk appetite, which sets out the scope within which pbb Group is prepared to assume risks. pbb Group uses this information to derive input for operative management, through limit systems, committee decisions, and other management decisions.

Limit and early warning systems have been implemented, in line with the risk appetite, for each type of risk as well as across risk types, at the level of capital management circuits. The strategy underlying the respective type of risk, together with the associated risk definition, risk calculation methods, and risk reporting systems are described in detail in the following chapters.

RISK TYPES

pbb Group distinguishes the following major risk types for its business activities:
- Credit risk (counterparty risk)
- Market risk
- Liquidity and Funding risk
- Operational risk
- Business and strategic risk
- Property risk
- Pension risk

Credit Risk (Counterparty Risk)

Definitions
The credit risk in general is defined as the risk due to an unexpected default or decline in the market value of a receivable (loan or bond) or a derivative (alternatively of an entire portfolio of claims/derivatives). The reason for this can be either a deterioration in a country's or counterparty's creditworthiness or by a deterioration in collateralization.

The credit risk comprises the default risk, migration risk, realization risk of defaulted positions, transfer and conversion risk, tenant risk, settlement risk, extension risk as well as concentration risk which are defined as follow in pbb Group's risk strategy:

- Default risk denotes the risk of a default occurring on receivables. This includes defaults of loans or other credit products (lending risk), or bonds and other securities (issuer risk), as well as the risk of default on receivables under derivatives contracts (counterparty risk/replacement risk) or money market transactions (repayment risk). The possible default of sovereign or regional governments is included as a special case (sovereign default risk).
- Migration risk is the risk of a loss in value of a receivable caused by rating migration. This includes both the risk of rating migrations of traditional borrowers as well as rating migration of bonds and other securities and receivables from derivatives and money market transactions. The impact of a rating migration concerning sovereign or regional governments as a special case is included, too.
- Realisation risk related to defaulted clients is the risk that the risk provisioning recognised changes over the analysis period, or the risk of actual amounts realised differing from the risk provisioning.
- Transfer risk is the risk that a government or central bank restricts the use of the currency to their own country. This includes the conversion risk, which is the risk that a government or central bank declares its own currency as non-convertible. Together with the sovereign risk, the transfer and the conversion risk form the country risk.
- Tenant risk describes the risk that losses in rental income for properties will negatively influence the respective borrowers' debt service capacity. In addition, it includes the secondary concentration risk (tenant cluster risk), which arises when one and the same tenant is involved in multipleproperties funded by the bank.
- Fulfilment risk is defined as the risk that the Bank makes a payment or delivers an asset which has been sold to a counterparty but does not receive a payment or the purchased asset.
- Extension risk is the risk of an unexpected extension of the holding period of a credit risk related asset.
- Concentration risk is defined as the risk of cluster formation in relation to a risk factor or counterparty, or a strongly correlated group of risk factors or counterparties.

Credit Risk Strategy and Principles

pbb Group has broken down the overall credit portfolio into the segments Real Estate Finance (REF), Public Investment Finance (PIF), Value Portfolio (VP) and "Consolidation & Adjustments" (C&A). The strategic business is attributable to commercial Real Estate Finance (REF) and Public Investment Finance (PIF). The risk strategy of pbb Group also reflects this structure.

Please refer to the information in the section "Fundamental Information about the Group" for a description of the business focus with regard to strategic portfolios, and for statements outlining the strategy adopted for the run-down portfolio.

Credit Risk Reports

The credit risk reports of pbb Group provide information about the following main components:

- The pbb Group Risk Report contains the development in volumes as well as relevant credit risk management indicators such as the development of the expected loss as well as the unexpected loss via value at risk (VaR). The report shows the credit risk at the level of pbb Group in the context of the overall bank risk and the risk-bearing capacity, it reports limit utilisations and violations of existing limits, and also identifies risk concentrations. Key indicators, such as the development of the exposure at default (EaD), the expected loss (EL), the credit value at risk (Credit VaR) as well as problem loans are integrated in this report and are discussed by the Management Board; the report is also submitted to the RLA of the Supervisory Board to be noted and dealt with by the RLA regularly in its meetings.

- For decisions to be made regarding new business, or regarding material changes to the credit quality of existing financings (such as a maturity extension), key financial indicators, content and analysis are presented to, and discussed by the Credit Committee.
- In the active business, further regular reports support operational management with regard to the management and timely recognition of risks at the sub-portfolio level.
- Unusual developments which might result in a major deterioration in the risk position of an individual exposure are ad-hoc reported to a wider group up to the CRO by way of so-called "Credit Issue Notes".

Credit Risk Quantification via Economic Capital and Risk-weighted Assets according to Capital Requirements Regulation (CRR)

Credit Portfolio Model For calculating the economic capital for credit risk pbb Group uses a credit portfolio model. For details concerning this model and economic credit risk quantification, please refer to the sections "Internal Capital Adequacy Assessment Process (ICAAP)".

Stress Testing The stress tests for economic capital in credit risk are described in greater detail in the section "Internal Capital Adequacy Assessment Process (ICAAP)".

In addition to the stress tests for economic capital, there are also RWA reverse stress tests. These are designed to examine the extent to which a certain risk parameter (e.g. rating, loss given default (LGD), currency) may change before a minimum ratio (Tier 1 ratio, Common Equity Tier 1 (CET1) ratio or own funds ratio) is no longer met. The minimum ratios are based on the bank-specific SREP ratios. Tolerance change levels have been defined for all tested risk parameters; these levels must not be violated if the test of pbb Group is to be successfully completed.

Credit Risk Quantification according to CRR The Basel III Framework Agreement of the Basel Committee was implemented in the European context by means of the Capital Requirements Regulation ("CRR"). pbb Group applies the so-called Advanced Internal Rating-Based Approach (Advanced IRBA) and the Standardised Approach (STA).

Credit Risk Management and Monitoring

Credit Risk Management At the portfolio level, the intended portfolio structure is defined in the risk strategy by means of structure components. The limits are also based on the available financial resources, and include for pbb Group for example:
Limiting of country risks
Definition of strategic risk parameters (e.g. regions, financing duration)

The following reports and measures are key elements for monitoring compliance with the defined limits and the intended risk and return parameters at the portfolio level and also at the level of individual transactions:

- Analysis of portfolio developments in the Risk Committee
- Determining the credit-VaR at the portfolio level by way of a credit portfolio model and partly limiting at the segment level; analysis of concentration risks and various stress tests
- Central Group-wide monitoring of risk concentrations by way of special, regular and ad hoc evaluations, such as regional or product-specific evaluations
- Continuous analysis of the portfolio and the relevant markets by the local Credit Risk Management units
- Regular evaluation of the collateral
- Special reports for exposures which are potentially at risk (e. g. "credit issue notes")
- Calculation of a risk-adjusted margin using the economic return after tax

Depending upon the counterparty group, Expected Loss class or exposure size at GCC (Group of Connected Clients) level, the lending authority regulations determine the approval powers for new as well as existing exposures. Approval powers are assigned to individual employees in line with their individual experience and qualification.

Credit Risk Management and Monitoring At the level of individual transactions, the credit process guidelines define the necessary steps of assessing risk for new business as well as for substantial changes as prolongations or increase of credit limit and the procedures for transferring exposures to the watchlist or workout.

Core processes of credit risk management and monitoring as well as the relevant areas of the CRO function which are involved are described in the following:

The CRM entities carry out the initial risk analysis for new business and annual risk analysis for existing business. Probability of default (PD) and loss given default (LGD) rating tools, which are developed in the unit RMC and annually validated and calibrated, are used for valuation purposes and for preparing the credit decision in new and prolongation business. Property Analysis & Valuation (PAV) provides support for analysing and valuing collateralised properties.

The Legal department, where appropriate together with external lawyers/lawyers' offices, is responsible for the contract and collateral organisation.

Defined early warning indicators are constantly monitored by CRM. If essential problems are identified, an exceptional test is performed on the credit default risk (including a review of the value of collateral) and appropriate alternative actions are identified. Such cases are also included in a monthly, at least quarterly monitoring cycle and presented in the Watchlist Committee.

If there are indicators for a deterioration of credit quality, the level of the stage 3 impairment is calculated in accordance with IFRS or, in the case of specific allowances, in accordance with the HGB. In the Risk Provisioning Committee, the results are discussed and, where necessary, decisions are taken with regard to creating or reversing stage 3 impairments/specific allowances.

Where an individual decision is taken as to whether a critical exposure – in the form of a stage 3 impairment (IFRS) or a specific allowance (HGB) – is to be restructured or liquidated, scenario analyses outlining the potential development of the borrower, of collateral and/or the relevant market, are taken into account. These analyses are presented to the Credit Committee, which approves them or issues a recommendation for approval to holders of higher lending authority.

Critical exposures (watchlist) as well as restructuring and workout cases (non-performing loans) are reported on an aggregate basis monthly in the Group Risk Report and in the Risk Committee and also, upon request, in special analyses to the Management Board and Supervisory Board.

Hedging and Minimising Risk by Collateral

In the REF segment, financing arrangements are normally backed by property charges. On the occasion of the regular credit reports for existing financing arrangements or as part of the decision-making process in the case of new financing, the LTVs (loan-to-value) as well as the property (amongst others micro and macro location, rental situation, condition of property) and market circumstances are discussed and are also taken into consideration as part of the assessment process for individual loans.

In addition to the property charge, the financing security in the REF segment also generally comprises amongst others rent assignation as well as the assignation of insurance claims, accompanied by extensive notification and consultation obligations of the borrowers. Apart from the property charges, only a few more selected securities are considered to be of value in the credit assessment process or in the calculation of LGD, and in particular this is applicable for cash security, furthermore under certain circumstances bank guarantees, other credit protections as well as guarantees of public-sector institutions. Corresponding risk buffers are considered in relation to foreign currency collateral, that means in a currency differing from the loan currency, in order to take account of potential exchange rate risks.

Properties in the REF business are valued using strict quality criteria. Property collateral values are determined when the loan is initially granted, and reviewed on an annual basis. With Property Analysis & Valuation (PAV), pbb maintains an independent real estate analysis unit which reports to the Management Board member responsible for Treasury: All staff members in the PAV department who are involved in real estate analysis are certified in accordance with ISO 17024 (HypZert standard), and have usually gained additional qualifications (such as RICS membership). This department is always involved in the initial valuation (when a new loan is granted) or regular revaluations, as well as in the valuation reviews which are carried out at least once a year. Depending on the type and location of the property involved, market developments and other risk indicators, valuation reviews may also be carried out, in some cases, by credit department staff (CRM), based on defined parameters and processes.

For development financings, regular monitoring comprises the monitoring of planning progress, budget, procurements, construction schedule, sales/letting progress and construction stage. As a rule, for complex developments, monitoring is carried out by external project monitors on the Bank's behalf, on a monthly to quarterly basis, coordinated and supervised by PAV. For less complex developments, construction progress is monitored at least every three months, by experienced and specialised internal property analysts. CRM monitors costs, thus facilitating a current overview of actual costs, as well as a cost projection for the project, which is reconciled against the results of internal monitoring (as well as external monitoring, if applicable). This allows for recognition of any divergence from project planning (and hence, project risks during construction) as early as possible.

In the PIF segment, guarantees are often accepted as collateral (including contractual guarantees from public-sector authorities, export credit guarantees). Moreover, Public Investment Finance exposures often involve a specific legal framework, such as the maintenance obligation (the so called Anstaltslast) of public-sector entities in Germany, or other (direct and indirect) cover mechanisms which allow for recourse to a public-sector institution in the case of borrowers organised under public law. For some exposures in PIF, guarantees and indemnities or the legal framework are supplemented by additional loan collateral, as well as borrowers' disclosure or consultation duties. However, such additional loan collateral is generally not considered as valuable in assessing the exposure, or for the purposes of calculating LGD.

In Treasury, mainly cash contributions and securities are made available or accepted as collateral when trading with other banks. The collateralisation is based on standard agreements, which can be amended in individual cases if required or which can be subjected to individual review by the legal department.

Credit Portfolio
The entire credit portfolio of the pbb Group is calculated by using the exposure at default (EaD).

For most products, EaD is equal to the IFRS carrying amount (including accrued interest). Committed, undrawn credit lines are additionally included in EaD with a product-specific credit conversion factor (CCF). The CCF indicates the portion of an undrawn credit line that is expected to be drawn upon (based on experience) within one year before a potential default. Derivatives and repo transactions are an exception since their EaD is not identical to their carrying amount but must be determined, in accordance with the Capital Requirements Regulation ("CRR") using a different methodology. For instance, the regulatory mark-to-market method is applied to derivatives, using the market value plus any regulatory add-ons for potential future market value increases and taking any netting or collateralisation effects into account.

The Group's credit portfolio had an aggregated EaD of € 55.5 billion (31 December 2018: € 58.1 billion).

Overview of the Total Exposure of pbb Group: € 55.5 billion EaD The credit portfolio is broken down into three segments:
> Real Estate Finance (REF)
> Public Investment Finance (PIF) as well as
> the non-strategic segment Value Portfolio (VP) which is earmarked for being wound down.

In addition "Consolidation & Adjustments" shows besides the internal reconciliation and consolidation positions, the EaD for transactions which are not directly attributable to the operating segments. These are basically asset positions for asset and liability management.

EaD in the C&A segment was fully attributable (100%; 31 December 2018: >99%) to EL classes 1 to 8; according to the internal classification, these are considered investment grade.

Total portfolio: EaD according to operating segments

			Change	
in € billion	**31.12.2019**	**31.12.2018**	in € billion	in %
Real Estate Finance	29.8	29.9	-0.1	-0.3
Public Investment Finance	7.1	7.6	-0.5	-6.6
Value Portfolio	15.6	16.3	-0.7	-4.3
Consolidation & Adjustments	2.9	4.3	-1.4	-32.6
Total	**55.5**	**58.1**	**-2.6**	**-4.5**

As of 31 December 2019, the total exposure (EaD) of the pbb Group declined by € 2.6 billion to € 55.5 billion, compared to year-end 2018. Explanations concerning changes in individual segments are provided with the detailed presentation of the respective segment. On the whole, the percentage of exposure at default (EaD) in the strategic REF segment increased again (54%; 31 December 2018: 52%), whereas it remained unchanged compared to year-end 2018 in PIF (13%) and in the non-strategic VP segment (28%). The percentage share of the EaD in C&A decreased slightly compared to year-end 2018 (5%; 31 December 2018: 7%).

Risk Parameters The expected loss (EL) for a time period of one year is calculated for the entire exposure, with the exception of non-performing loans for which a stage 3 impairment has already been recognised. The EL is calculated from the annual probability of default (PD), the loss given default (LGD) and the exposure at default (EaD) using the parameters defined under Basel III.

EL for pbb Group amounted to €129 million as at 31 December 2019 (31 December 2018: €86 million). This increase was mainly due to the stricter calibration of loss given default (LGD) in line with the targeted new risk weightings in the core portfolio, which are explained in the chapter "Key Regulatory Capital Ratios".

Total exposure: expected loss according to operating segments

in € million	31.12.2019	31.12.2018	Change in € million	Change in %
Real Estate Finance	102	56	46	82.1
Public Investment Finance	1	2	-1	-50.0
Value Portfolio	26	28	-2	-7.1
Consolidation & Adjustments	-	-	-	-
Total	**129**	**86**	**43**	**50.0**

Future developments, such as changes in the economic environment or developments concerning individual risks, may result in changes to the EL figures set out above. Furthermore, actual losses incurred may differ materially from expected losses.

Economic Credit Risk Capital pbb Group calculates economic capital for credit risk using a credit portfolio model. For details concerning credit risk quantification, please refer to the section "Internal Capital Adequacy Assesment Process (ICAAP)".

Regional Breakdown of the Portfolio At the reporting date, the main focus of the exposure of the pbb Group was unchanged on Western Europe. Germany continued to account for most of the overall exposure, with 40% (€22.3 billion). The year-on-year EaD reduction in Germany (down €0.4 billion) was attributable to lower money market exposure in C&A, as well as to repayments in PIF and the VP, which exceeded new business originated in the REF portfolio. The €1.1 billion EaD decrease in France resulted largely from repayments in the REF and PIF segments, and money market transactions with French credit institutions reported under C&A. The decrease in the REF portfolio in the United Kingdom (€1.1 billion) and Sweden (€0.4 billion) was mainly attributable to repayments. The lower exposure to Spain was mainly to due to sales in the VP segment.

The significant exposure increase in the USA of €0.9 billion was attributable to new business in the strategic segment REF.

The largest items of the category "Other Europe" were the Netherlands with €0.8 billion and Belgium with €0.3 billion (31 December 2018: the Netherlands €0.8 billion, Belgium €0.4 billion). The category "Other", which accounted for €1.3 billion (or around 2% of the portfolio), largely comprises bonds issued by supranational organisations.

Total portfolio: EaD according to regions

in € billion	31.12.2019	31.12.2018	Change in € billion	Change in %
Germany	22.3	22.7	-0.4	-1.8
France	7.6	8.7	-1.1	-12.6
Austria	6.6	6.3	0.3	4.8
United Kingdom	3.7	4.8	-1.1	-22.9
USA	2.8	1.9	0.9	47.4
Spain	2.4	2.8	-0.4	-14.3
Other Europe[1]	2.1	2.4	-0.3	-12.5
Italy	2.0	2.1	-0.1	-4.8
Poland	1.6	1.6	-	-
Other[2]	1.3	1.5	-0.2	-13.3
Sweden	0.9	1.3	-0.4	-30.8
Portugal	0.7	0.9	-0.2	-22.2
Finland	0.6	0.5	0.1	20.0
Czech Republic	0.4	0.4	-	-
Hungary	0.3	0.2	0.1	50.0
Total	**55.5**	**58.1**	**-2.6**	**-4.5**

[1] As of 31 December 2019 the category "Other Europe" comprises the Netherlands, Belgium, Switzerland, Slowenia, Slovakia, Denmark, Luxembourg, Ireland, Romania and Latvia.
[2] As of 31 December 2019 the category "Other" comprises amongst others Supranationals, Japan and Canada.

Depending on the results of the internal rating process, maximum limits are defined for each individual country; these limits restrict pbb Group's business activities. All country limits are monitored daily by RMC.

Real Estate Finance: € 29.8 billion EaD

The REF segment comprises real estate loans and related customer derivatives. The EaD of the REF portfolio, which in comparison with the funding volume shown in the chapter "Development in Earnings" also includes undrawn credit lines – multiplied by a product-specific conversion factor – decreased slightly year-on-year by €0.1 billion to €29.8 billion. The reductions in the United Kingdom, France and Sweden were mainly due to repayments. The strongest exposure increases occurred in Germany and in the USA, reflecting new business. As at 31 December 2019, client derivatives included in the portfolio amounted to €0.1 billion EaD and thus held steady on the previous year-end.

Real Estate Finance: EaD according to regions

in € billion	31.12.2019	31.12.2018	Change in € billion	Change in %
Germany	14.8	14.2	0.6	4.2
United Kingdom	3.5	4.3	-0.8	-18.6
France	3.2	3.7	-0.5	-13.5
USA	2.8	1.9	0.9	47.4
Other Europe[1]	1.4	1.5	-0.1	-6.7
Poland	1.3	1.3	-	-
Sweden	0.9	1.2	-0.3	-25.0
Austria	0.5	0.5	-	-
Finland	0.5	0.4	0.1	25.0
Czech Republic	0.4	0.4	-	-
Spain	0.3	0.4	-0.1	-25.0
Hungary	0.1	0.1	-	-
Italy	0.1	0.1	-	-
Total	**29.8**	**29.9**	**-0.1**	**-0.3**

[1] As of 31 December 2019 the category "Other Europe" comprises the Netherlands, Switzerland, Belgium, Denmark, Luxembourg, Slovakia, Slowenia, and Romania.

The increase in the categories Office buildings and Housing construction was due to new business.

Real Estate Finance: EaD according to property type

in € billion	31.12.2019	31.12.2018	Change in € billion	Change in %
Office buildings	13.6	13.0	0.6	4.6
Housing construction	5.8	5.0	0.8	16.0
Retail	4.9	5.9	-1.0	-16.9
Logistics/storage	2.9	3.0	-0.1	-3.3
Hotel/leisure	1.3	1.5	-0.2	-13.3
Other	0.8	0.9	-0.1	-11.1
Mixed Use	0.5	0.6	-0.1	-16.7
Total	**29.8**	**29.9**	**-0.1**	**-0.3**

At 31 December 2019, investment financings continued to dominate the portfolio (83%; 31 December 2018: 82%); development financings accounted for 16% of EaD (31 December 2018: 16%). There was still strong demand throughout 2019 for both commercial real estate investment and development financings. In line with its conservative risk strategy, the pbb Group provided development financings exclusively to professional partners, and subject to commensurate covenants regarding equity, pre-sales and pre-letting. Investment financings are defined as real estate loans, the debt servicing ability of which largely depends upon current cash flows from the property.

Real Estate Finance: EaD according to loan type

in € billion	31.12.2019	31.12.2018	Change in € billion	Change in %
Investment financing	24.8	24.6	0.2	0.8
Development financing	4.7	4.9	-0.2	-4.1
Customer derivatives	0.1	0.1	-	-
Other	0.2	0.3	-0.1	-33.3
Total	**29.8**	**29.9**	**-0.1**	**-0.3**

Public Investment Finance: € 7.1 billion EaD

The portfolio comprises the following financing:

(I) Financing concluded directly with a public sector debtor, eligible according to the Pfandbrief Act, on the basis of a specific earmarking according to a defined product catalogue;

(II) Financing of companies, which have a public sector or private legal structure and funding, which are to a great extent collateralised with a public sector guarantee within the meaning of the German Pfandbrief Act (transport and utility companies, municipal utilities, special-purpose associations, management companies, non-profits, associations); and

(III) Financing of special-purpose vehicles, which are almost entirely collateralised with a public sector guarantee within the meaning of the German Pfandbrief Act. This also includes export financings covered by insurance policies or guarantees issued by the Federal Government or by other export credit agencies permitted for inclusion in Pfandbrief cover.

In addition, the portfolio comprises only very few financings for public-sector institutions without public guarantee.

The decrease in EaD in the PIF segment of € 0.5 billion, compared to the previous year-end, was due in particular to maturing loans and bonds as well as repayments in Germany and France, which more than compensated for new business generated mainly in France.

Public Investment Finance: EaD according to regions

in € billion	**31.12.2019**	**31.12.2018**	Change in € billion	Change in %
France	3.7	3.9	-0.2	-5.1
Germany	1.5	1.7	-0.2	-11.8
Spain	1.0	1.0	-	-
Austria	0.3	0.3	-	-
Other Europe[1]	0.3	0.3	-	-
United Kingdom	0.2	0.2	-	-
Other[2]	0.1	0.1	-	-
Finland	0.1	0.1	-	-
Sweden[3]	-	-	-	-
Total	**7.1**	**7.6**	**-0.5**	**-6.6**

[1] As of 31 December 2019 the category "Other Europe" comprises Belgium, the Netherlands and Switzerland.
[2] As of 31 December 2019 the category "Other" comprises amongst others Canada and Supranationals.
[3] Sweden (31 December 2019): € 42 million.

"Public Sector Borrowers" summarises claims against sovereign states (28%), public-sector enterprises (20%), and regional governments and municipalities (52%). The definition also includes exposures guaranteed by these counterparties.

Public Investment Finance: EaD according to counterparty structure

in € billion	**31.12.2019**	**31.12.2018**	Change in € billion	Change in %
Public sector borrowers	6.8	7.5	-0.7	-9.3
Companies/special-purpose entities[1]	0.2	0.1	0.1	100.0
Financial institutions[2]	-	-	-	-
Total	**7.1**	**7.6**	**-0.5**	**-6.6**

[1] Largely collateralised by guarantees and surety bonds.
[2] Financial institutions with a state background or state guarantee.

Value Portfolio: € 15.6 billion EaD
The Value Portfolio comprises non-strategic portfolios of the pbb Group.

In line with the strategy, the further decrease in the exposure as of 31 December 2019 compared with 31 December 2018 was mainly due to repayments in exposures to Germany, Spain and Portugal. The EaD increase for Austria was due to changes in the general interest rate levels and the associated changes in hedge adjustments. In the category Other exposure to Supranationals decreased slightly. Germany and Austria continued to account for the lion's share of the portfolio.

Value Portfolio: EaD according to regions

in € billion	**31.12.2019**	**31.12.2018**	Change in € billion	Change in %
Austria	5.9	5.6	0.3	5.4
Germany	4.2	4.4	-0.2	-4.5
Italy	1.9	2.0	-0.1	-5.0
Spain	0.9	1.2	-0.3	-25.0
Other[1]	0.9	1.0	-0.1	-10.0
Portugal	0.7	0.9	-0.2	-22.2
France	0.7	0.7	-	-
Poland	0.2	0.2	-	-
Other Europe[2]	0.1	0.2	-0.1	-50.0
Hungary	0.1	0.1	-	-
Czech Republic	-	-	-	-
Finland	-	-	-	-
Total	**15.6**	**16.3**	**-0.7**	**-4.3**

[1] As of 31 December 2019 the category “Other” comprises Supranationals and Japan.
[2] As of 31 December 2019 the category “Other Europe” comprises Slovenia.
[3] Czech Republic (31 December 2019): €10 million; Finland (31 December 2019): 9 million.

EaD by Counterparty is shown including regulatory permitted guarantees or other forms of credit support.

Value Portfolio: EaD according to counterparty structure

in € billion	**31.12.2019**	**31.12.2018**	Change in € billion	Change in %
Public sector borrowers	14.5	14.8	-0.3	-2.0
Financial institutions[1]	1.2	1.5	-0.3	-20.0
Companies	-	-	-	-
Total	**15.6**	**16.3**	**-0.7**	**-4.3**

[1] Mainly Spanish covered bonds.

Structured Products

pbb Group’s residual holdings of Collateralised Debt Obligations guaranteed by one regional government had a notional value of €0.4 billion as at 31 December 2019 (31 December 2018: €0.5 billion) and a current fair value of €0.4 billion (31 December 2018: €0.5 billion).

Breakdown of on-balance sheet and off-balance sheet business by rating class

The following tables provide a breakdown of gross carrying amounts of non-derivative financial assets (excluding cash funds), and of default risks in irrevocable loan commitments and contingent liabilities, by internal rating class and impairment level. The breakdown is in line with pbb Group’s internal rating classes. The default definition follows Article 178 of the CRR.

Breakdown of non-derivative financial assets (excluding cash funds) by internal rating class and impairment level (as at 31 December 2019)

in € billion	Stage 1	Stage 2	Stage 3	FVPL	**Total**
Class 1	0.7	-	-	-	0.7
Class 2	13.9	-	-	0.3	14.2
Class 3	0.6	-	-	-	0.6
Class 4	-	-	-	-	-
Class 5	1.1	-	-	-	1.1
Class 6	-	-	-	-	-
Class 7	0.9	-	-	-	0.9
Class 8	1.9	-	-	-	1.9
Class 9	6.5	-	-	0.1	6.6
Class 10	4.6	-	-	-	4.6
Class 11	5.5	0.2	-	-	5.7
Class 12	5.1	0.6	-	0.1	5.8
Class 13	2.7	0.5	-	-	3.2
Class 14	1.6	0.3	-	-	1.9
Class 15	0.9	0.3	-	-	1.2
Class 16	1.0	0.3	-	-	1.3
Class 17	0.4	0.2	-	-	0.6
Class 18	0.6	0.1	-	-	0.7
Class 19	0.1	0.2	-	-	0.3
Class 20	0.1	-	-	-	0.1
Class 21	-	0.2	-	-	0.2
Class 22	-	-	-	-	-
Class 23 – 24	-	-	-	-	-
Class 25	-	-	-	-	-
Class 26	-	-	-	-	-
Class 27	-	0.1	-	-	0.1
Defaulted	-	-	0.5	-	0.5
Total	**48.4**	**3.1**	**0.5**	**0.6**	**52.5**

Breakdown of non-derivative financial assets (excluding cash funds) by internal rating class and impairment level (as at 31 December 2018[1])

in € billion	Stage 1	Stage 2	Stage 3	FVPL	**Total**
Class 1	0.7	-	-	-	0.7
Class 2	14.2	-	-	0.4	14.6
Class 3	0.3	-	-	-	0.3
Class 4	-	-	-	-	-
Class 5	0.3	-	-	-	0.3
Class 6	-	-	-	-	-
Class 7	1.6	-	-	-	1.6
Class 8	2.2	-	-	-	2.2
Class 9	6.4	-	-	0.1	6.5
Class 10	3.7	-	-	-	3.7
Class 11	5.8	0.7	-	-	6.5
Class 12	6.1	0.1	-	0.2	6.4
Class 13	2.7	0.5	-	-	3.2
Class 14	1.6	-	-	-	1.6
Class 15	1.4	0.1	-	-	1.5
Class 16	1.3	0.1	-	0.1	1.5
Class 17	0.4	-	-	-	0.4
Class 18	0.5	-	-	-	0.5
Class 19	0.2	0.2	-	-	0.4
Class 20	0.1	0.1	-	-	0.2
Class 21	0.1	0.2	-	-	0.3
Class 22	0.1	0.1	-	-	0.2
Class 23 – 24	-	-	-	-	-
Class 25	-	0.1	-	-	0.1
Class 26	-	-	-	-	-
Class 27	-	0.2	-	-	0.2
Defaulted	-	-	0.3	-	0.3
Total	**49.6**	**2.4**	**0.3**	**0.9**	**53.2**

[1] The gross carrying amounts as at 31 December 2018 were adjusted in accordance with IAS 8.42 (see note "Consistency").

Breakdown of irrevocable loan commitments and contingent liabilities by internal rating class and impairment level (as at 31 December 2019)

in € billion	Stage 1	Stage 2	Stage 3	**Total**
Class 1	-	-	-	-
Class 2	0.4	-	-	0.4
Class 3	-	-	-	-
Class 4 – 7	0.1	-	-	0.1
Class 8	0.1	-	-	0.1
Class 9	0.1	-	-	0.1
Class 10	0.2	-	-	0.2
Class 11	0.3	-	-	0.3
Class 12	0.4	-	-	0.4
Class 13	0.3	0.1	-	0.4
Class 14	0.4	-	-	0.4
Class 15	0.4	-	-	0.4
Class 16	0.5	-	-	0.5
Class 17	0.7	-	-	0.7
Class 18	0.4	-	-	0.4
Class 19	-	-	-	-
Class 20	-	-	-	-
Class 21 – 27	-	-	-	-
Defaulted	-	-	-	-
Total	**4.2**	**0.1**	**-**	**4.4**

Breakdown of irrevocable loan commitments and contingent liabilities by internal rating class and impairment level (as at 31 December 2018)

in € billion	Stage 1	Stage 2	Stage 3	**Total**
Class 1	-	-	-	-
Class 2	0.4	-	-	0.4
Class 3	0.2	-	-	0.2
Class 4 – 7	-	-	-	-
Class 8	0.2	-	-	0.2
Class 9	0.2	-	-	0.2
Class 10	0.2	-	-	0.2
Class 11	0.3	0.1	-	0.4
Class 12	0.5	-	-	0.5
Class 13	0.4	-	-	0.4
Class 14	0.2	-	-	0.2
Class 15	0.4	-	-	0.4
Class 16	0.9	-	-	0.9
Class 17	0.2	-	-	0.2
Class 18	0.2	-	-	0.2
Class 19	0.3	-	-	0.3
Class 20	0.1	-	-	0.1
Class 21 – 27	-	-	-	-
Defaulted	-	-	-	-
Total	**4.7**	**0.1**	**-**	**4.8**

Watchlist and Non-performing Loans

Early Warning System The early warning system of the pbb Group has defined criteria respectively threshold values (triggers) for including loans in the watchlist and for being classified as restructuring or workout loans (e.g. past due payments, failure to meet financial ratios – e. g. loan-to-value [LTV], interest service coverage [ISC]). The system constantly monitors whether a trigger has been set off. In the event of any problems being identified, the credit exposure is analysed and, where appropriate, promptly transferred to watchlist or restructuring and workout loans. In this context an assessment is made to determine whether there is an objective indication of an impairment.

Watchlist and non-performing loans (restructuring and workout loans) are defined as follows:

- Watchlist Loans: Payments past due by more than 60 days or another defined early warning signal is triggered (for instance insolvency of a main tenant in the REF segment).
- Restructuring Loans: A default has occurred (for example, due to payments past due by more than 90 days, or the borrower's insolvency), or another contractual or regulatory trigger is applicable. The focus with restructuring is on active implementation of a restructuring concept – with the objective of either returning the exposure to regular coverage, or realising collateral on the market, without enforcement measures. Credit quality is consistently tested for deterioration, and stage 3 impairments (in accordance with IFRS) or specific allowances (in accordance with the HGB) are recognized if necessary.
- Workout Loans: There are no indications that the loan can be restructured. Enforcement measures have been/will be introduced. Stage 3 impairments (in accordance with IFRS) or specific allowances (in accordance with the HGB) were recognised if necessary.

CRM REF Workout is also responsible for carrying out an impairment test in line with the relevant accounting regulations (HGB and IFRS).

Development of Watchlist and non-performing loans of pbb Group

	31.12.2019				31.12.2018				Change	
EaD in € million	REF	PIF	VP	Total [1]	REF	PIF	VP	Total [1]	in € million	in %
Workout loans	15	-	-	15	16	-	-	16	-1	-6.3
Restructuring loans	398	97	-	495	332	-	-	332	163	49.1
Non-performing loans	**413**	**97**	**-**	**510**	**348**	**-**	**-**	**348**	**162**	**46.6**
Watchlist loans	**112**	**34**	**153**	**300**	**1**	**38**	**167**	**206**	**94**	**45.6**

[1] No exposure in C&A.

Watchlist and non-performing loans rose by a total of €256 million during the period from 31 December 2018 to 31 December 2019.

The volume of watchlist loans increased by €94 million net. As well as additions in the amount of €112 million, which were largely made up of three exposures in the REF segment, there were exposure reductions in the amount of €18 million.

Non-performing loans increased by €162 million net during the year under review. In the REF segment, three financings of shopping centres in the United Kingdom totalling €283 million were transferred to the recovery management for non-performing loans. These were offset by a total of €218 million in successful workouts or restructurings and exposure reductions. New additions to non-performing loans in the PIF segment amounted to €97 million. Loans and advances to the borrower are fully covered by an export credit guarantee (extended by the Federal Republic of Germany).

Credit loss allowances and Provisions

Details on credit loss allowances and provisions – including their recognition and development – can be obtained from the notes.

Opportunities

The parameters for the risk dimensions for the credit risk are defined using statistical methods on the basis of numerous historical observations. The risk measures also depend on assumptions relating to future developments of macro-economic factors as well as developments on the credit markets. These economic conditions may turn out to be more positive than anticipated; in which case, potential losses from counterparty credit risk may theoretically be lower than quantified by the risk measures. Such potentially positive developments then represent opportunities for the pbb Group which can be utilised for reducing risk.

In specific terms, there are opportunities if fewer loans in future are affected by a default in performance than is assumed as part of the risk quantification process.

There are also opportunities if there are in future fewer migrations to less positive rating categories than assumed.

There are also opportunities if the loss ratios of non-performing loans in future are lower than was assumed as part of the risk quantification process. Lower loss ratios may be triggered by various positive developments. Firstly, it is possible that the process of disposing of collateral might generate higher proceeds than was originally assumed in the risk quantification process. Secondly, it is possible that a higher percentage of non-performing loans subsequently become performing loans again without any losses than had been the case in the past.

Besides positive developments in default rates or loss ratios, opportunities may arise in connection with counterparty credit risk – theoretically, and regardless of other corporate objectives – in the event of declining portfolio exposure. For instance, this may occur if borrowers redeem or repay their loans faster than anticipated, given contractual agreements or historical data. Exposure values in the

derivatives portfolio may decline where the market values of positions associated with replacement risk decrease, due to changes in certain market parameters such as interest rates or exchange rates.

Market Risk

Definition

Market risk is defined as the risk of a market value loss, or a negative change in net interest income for the period, due to volatility of the market prices of financial instruments. Transactions entered into by pbb Group are mainly exposed to the following types of market risk:

- General interest rate risk (risk from changes in market interest rates)
- Credit spread risk (risk from changes in credit spreads)
- Volatility risk (risk from changes in implied volatility)
- Foreign currency risk (risk from changes in foreign exchange rates)
- Basis risk (risk from changes in tenor basis spreads or cross-currency basis spreads)
- Concentration risk (risk of additional losses due to a non-diversified portfolio mix)

Interest rate risk in the banking book

Following the introduction of EBA guidelines EBA/GL/2018/02 on controlling interest rate risk in the banking book (IRRBB) on 30 June 2019, pbb has comprehensively expanded its risk measurement, controlling and monitoring environment. In addition to interest rate risks at present value, pbb also incorporates period interest rate risks and measures, controls and monitors these on a regular basis.

Besides interest rate risks, the requirements set out in the EBA guidelines extend to credit spread risks in the banking book (CSRBB). In this connection, all securities held as assets and measured at amortised cost were added to the scope of instruments to be included in credit spread risk. This increases the impact of credit spread risks on market risk VaR.

Market Risk Strategy

pbb Group adheres to the following fundamental principles in relation to market risks in terms of the present value perspective and of the periodic perspective:

- Transactions may be conducted exclusively in financial instruments which have successfully passed the new product process, and for which market values are either observable or determinable via a model.
- All positions entered into are subject to daily monitoring, in terms of sensitivity, value-at-risk (VaR) and performance, which is independent from trading units.
- Interest rate risk in the banking book is identified, measured, managed and monitored using both a present value approach as well as in terms of net income for the period. In this context, the present value approach is the primary approach for interest rate risk management, supplemented by the integration of interest rate risk of quarterly net interest income.

Market Risk Management Organisation

Positions are monitored by way of a present value approach by the RMC department, which is separated from trading in the structural organisation, right through to the Management Board. The Finance department monitors the interest rate risk for the period.

Market Risk Reports
RMC prepares detailed market risk reports for senior management and operational management purposes, on a daily basis. The daily market risk report, which is primarily addressed to the Management Board, includes:
> market risk value-at-risk (VaR) and VaR limit utilisations across all relevant levels of the portfolio structure;
> sensitivities of market risk factors at various levels of detail and monitoring of sensitivity trigger limits;
> a presentation of economic performance measurement and breakdown by risk factors.

Since the new EBA guidelines on IRRBB (EBA/GL/2018/02) came into effect as at the reporting date of 30 June 2019, pbb has provided quarterly reports on changes in effects on income, and effects on accumulated other comprehensive income (recognised directly in equity), given pre-defined interest rate scenarios and assuming a dynamically changing balance sheet, to monitor interest rate risk for the period.

Market Risk Measurement and Limits
Market risk Value-at-Risk RMC determines VaR attributable to market risk, at an overall as well as partial portfolio level, on a daily basis, using a simulated model based on historical data. The VaR determination includes all positions exposed to market risks.
> Since March 2019, the simulation model has been based on a one-year market data history which is included in the simulation on an equally weighted basis. Prior to that date, pbb had used a ten-year market data history. The adoption of a shorter market data history in market risk VaR guarantees quicker adjustment to market data movements of the recent past.
> Individual types of market risk are aggregated to form a total VaR, which forms the basis of limit monitoring.
> For the purposes of daily operational risk management, Market risk VaR is determined using a holding period of ten days and a 99% confidence interval.

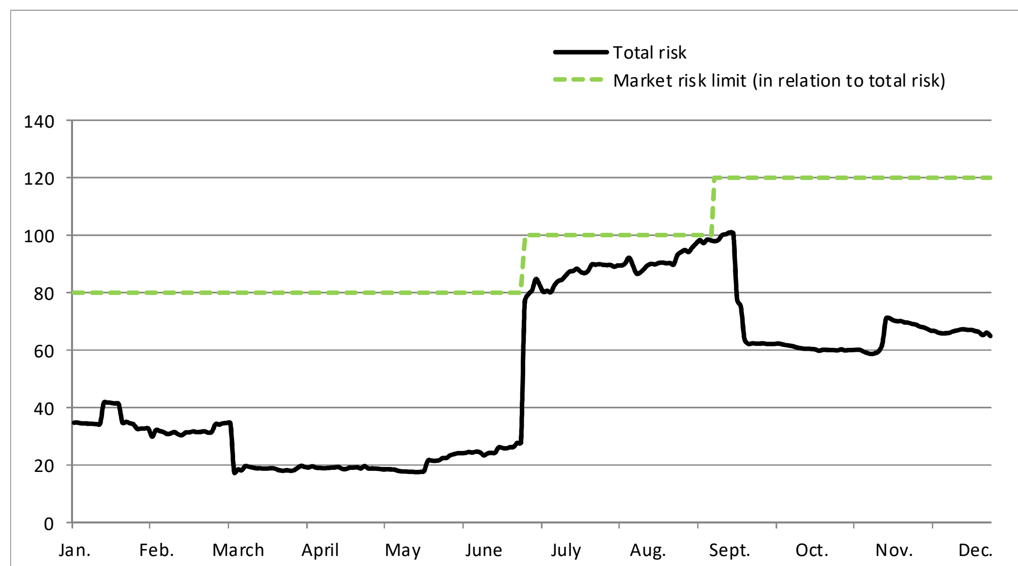
As at 31 December 2019, market risk VaR amounted to €65 million, taking diversification effects between the individual market risk types into consideration (31 December 2018: €35 million). The increase in market risk VaR at 30 June can be attributed primarily to the aforementioned increase in credit spread risks, brought about by the introduction of the EBA guidelines. Hence, the market Risk VaR limit was raised from €80 million to €100 million, and to €120 million in September 2019, to appropriately take the aforementioned credit spread risks in market risk VaR (after introduction of the EBA guidelines) into account.

The consolidated IRRBB VaR of all interest rate risk categories in the banking book (i.e. gap risk, basis risks and volatility risks of exposures that are sensitive to interest rates) amounted to €45 million and CSRBB VaR amounted to €64 million (both as at year-end 2019). As well as limiting market risk VaR, specific limits have been monitored since the introduction of the EBA guidelines as of 30 June 2019 for IRRBB VaR (limit as at the 2019 year-end: €85 million) and CSRBB VaR (limit as at the 2019 year-end: €100 million).

There were no breaches of market risk VaR limits at pbb Group level during the period under review.

The following chart shows the development of market-risk-induced VaR, compared to the market risk VaR limit during the course of the year:

Market risk VaR (10 days, 99%)
and market risk limit January to December 2019
in € million



The VaR assessment is complemented by additional tools, such as sensitivity analyses, stress tests and back-testing.

Sensitivity Analyses Overnight yield curves are used for the purposes of measurement relevant to sensitivity analyses. Sensitivity analyses quantify the impact of changes in individual market parameters upon the value of positions. For instance, the credit spread sensitivity provides an indication of the change in economic present value which results from a, isolated one basis point increase in the credit spreads which are relevant for measurement purposes.

Stress Testing Whilst VaR measures market risk in "normal" market conditions and does not provide a measure for potential maximum losses, internal economic stress scenarios are used to map market risk in difficult or even extreme economic framework conditions. pbb Group employs hypothetical and historical stress scenarios for key risk drivers on a monthly and quarterly basis, to determine the impact of strong to extreme changes in market data or assumptions regarding client behaviour on the economic present value.

In addition to internal economic stress scenarios, the external regulatory stress scenarios relating to the supervisory outlier test are calculated and analysed. The Management Board of pbb and the executive bodies are informed about the results of stress test scenarios on a regular basis. In connection with managing interest rate risk in the banking book (including credit spread risks), the changes in present value of selected internal and external stress scenarios have also been monitored through specific limits or triggers since June 2019.

Back Testing The quality of the risk measurement methods in use is checked on an ongoing basis by comparing one-day VaR figures to the actual changes occurring in the portfolio's present value on a daily basis. pbb Group has adopted the Basel Capital Accord's "traffic light" system for the qualitative analysis of its risk model. For this purpose, the number of outliers detected in backtesting within a period of 250 trading days are counted. As at end of 2019, based on a data history of 250 trading days, three outliers were observed. The risk model employed by pbb Group therefore has "green" status, as defined in the "traffic light" system of the Basel Capital Accord.

Basis Risks Basis risks refer to tenor spread and cross-currency spread risks, which are quantified within the framework of the VaR model. Tenor spread risks (€6 million) and cross-currency spread risks (€3 million) were shown at the reporting date.

Periodic interest rate risks With the new EBA guidelines on IRRBB (EBA/GL/2018/02) having come into effect as at the reporting date of 30 June 2019, pbb introduced a dynamic model for measuring and monitoring period interest rate risks, thus simulating changes in future income statements and balance sheet developments, which will materialise if the balance sheet develops as planned, and under pre-defined interest rate scenarios. Measurement and monitoring of periodic interest rate risks was carried out at the end of each quarter, for a simulation horizon covering the following four quarters. Negative deviations from the base value were monitored, using a trigger of €60 million for effects on income, and a trigger of €100 million for effects on accumulated other comprehensive income (recognised directly in equity). Both triggers were not exceeded during the year under review.

Economic Capital for Market Risk The chapter "Internal Capital Adequacy Assessment Process (ICAAP)" provides details concerning the calculation as well as the quantification of economic capital for market risk.

Mapping and Recognition of Economic Hedges as On-balance-sheet Hedges

The concept of hedge accounting refers to specific accounting rules applicable to hedge relationships in accordance with IFRS, entered into for the purpose of neutralising the change in value of the hedged underlying transaction against the change in value of the hedging instrument to a large extent. The criteria set out in IFRS must be satisfied for a hedge to be recognised accordingly. To a certain extent, these criteria – such as the requirements relating to hedge effectiveness – are inconsistent with the methods applied to bank management. As a result, there may be differences between economic hedges and hedge relationships recognised on the balance sheet.

Market Risk Management, Monitoring and Reduction

pbb Group uses a three-pillar approach for managing and monitoring market risk:

- management of positions maintained by the Treasury
- risk measurement and monitoring compliance with limits (independent from trading units) and
- escalation processes across all decision-making bodies, right through to the Management Board

For all positions, market risk is monitored (independent from trading units) through a combination of VaR-limits and sensitivity triggers. Financial derivatives are mainly used for hedging purposes.

General Interest Rate Risk General interest rate risk (gap risk) amounted to €40 million as at year-end 2019 and was thus above the figure seen at year-end 2018 (€36 million).

Volatility Risk Volatility risk amounted to €2 million as at end of December 2019 (end of 2018: €3 million).

Credit Spread Risk (CSRBB) The present value Credit spread risk reflects potential changes in the present value of exposures as a result of changes in the corresponding credit spread. The majority of credit spread risk is attributable to assets eligible as cover for Pfandbriefe. The Bank has risk measurement systems in place for calculating credit spread risk for all relevant exposures. Until 30 June 2019, the VaR limit applied to all credit spread risks for asset instruments at fair value through profit and loss (FVPL) or at fair value through other comprehensive income (FVOCI). Since 30 June 2019, these – as outlined above – have also been joined by the credit spread risks of those securities held as assets that are measured at amortised cost. Accordingly, the credit spread risk increased and amounted to €64 million as at end of December 2019 (year-end 2018: €28 million).

Other Market Risks The present value of foreign currency risk amounted to €1 million as at end of 2019.

Outlook
The management of interest rate risk in the banking book was updated upon the introduction of the EBA guidelines (EBA/GL/2018/02) in June 2019. However, additional market risk adjustments are pending as a result of supervisory requirements, for example, on credit spread risks in the banking book. General uncertainty in the economic and political environment (including central banks' interest rate policies, Brexit, global trade conflicts, flashpoints in the Middle East, climate change impacts) may imply elevated market volatility. In the event that new or changed regulatory requirements – or changes in the political and economic environment – require action, appropriate measures will be taken in good time.

Opportunities
As detailed above, the sensitivities result in value at risk: a possible future (economic) loss in the event of an unfavourable market development. The very same sensitivities may also result in economic gains, in the event of a positive market development. For instance, high credit spread sensitivities represent a risk as described above. In the event of a narrowing of the relevant credit spreads, however, these credit spread sensitivities will yield economic profits, constituting an opportunity.

Open interest rate risk exposures (from an economic perspective) may indeed be neutral or even income-enhancing for periodic interest rate risk; this is the case for medium- to long-term fixed-rate loans, for example.

IBOR reform
Interbank offered rates (IBOR) are used as reference rates when determining the prices of numerous financial Instruments. Given the weaknesses of interbank rates used to date, which have become evident over recent years, legislators and regulatory authorities worldwide have been working on establishing a system of transaction-based risk-free reference interest rates. In the EU, this has been accomplished through the Benchmark Regulation (2016/1011 (EU) – "BMR"), which came into force on 1 January 2018. Specifically, IBOR rates are to be replaced by alternative reference rates – especially by risk-free overnight interest rates based on actual transactions, determined as an average rate for overnight interbank deposits. Since many of the changes involved are market-driven, there continues to be significant uncertainty surrounding the timing and the precise nature of the changes.

The replacement of existing IBOR reference rates from the end of 2021 onwards – as prescribed by the EU BMR – presents numerous challenges for pbb, affecting products as well as processes and systems. To meet these challenges, pbb launched a cross-divisional project for implementation of the IBOR reform back in 2018, and has taken numerous steps in order to be prepared for the IBOR changeover. The project team regularly reports to pbb's Management Board. Topics addressed by the project include finding fallback rules for discontinued reference rates, the changeover of LIBOR-based business, as well as operational issues. For instance, all new contracts pbb has entered into since 2019 which relate to a reference interest rate affected by the IBOR reform include a fallback provision that facilitates the swift changeover to a substitute reference rate preferred by regulators or established in the market. In some cases, fallback provisions for derivatives and financial liabilities

were already agreed upon under framework or individual agreements. Moreover, pbb is monitoring the development of alternative reference rates discussed by supervisory authorities and market participants very closely indeed, in order to be able to assess the resulting impact upon pbb at an early stage. The Bank plans to uniformly convert the fair value discount curves used for the purposes of discounting and measurement, and in risk models, to the new risk-fee reference rates on a single record date in 2020, for all products across the Group.

The EURIBOR calculation methodology was revised in 2019: the European Money Markets Institute (EMMI), based in Belgium, has determined and disseminated EURIBOR reference rates since July 2019 on behalf of the EU. Thanks to the BMR conformity of the revised EURIBOR reference rates, market participants (including pbb) will be able to use EURIBOR reference rates beyond 1 January 2020, for both existing and new contracts. pbb expects EURIBOR to remain available as a reference rate going forward. Given that the EURIBOR revision was purely methodological in nature, this change has not resulted in any material effects for pbb, neither for the valuation of financial instruments or hedge accounting, nor from a legal perspective.

Liquidity and Funding Risk

Definition
Liquidity risk is defined as the risk of not being able to meet the amount and/or due dates of existing or future payment obligations, in full or on time.

Internal Liquidity Adequacy Assessment Process
In accordance with the Supervisory Review and Evaluation Process (SREP), pbb has conducted an Internal Liquidity Adequacy Assessment Process (ILAAP), which was examined and approved by the Management Board. The ILAAP should ascertains that all material liquidity and funding risks can be identified, measured and monitored, and that measures to prevent a liquidity shortage are taken in good time if required.

Liquidity Risk Strategy
The Management Board determines both the risk strategy as well as the risk appetite of pbb Group. The liquidity risk strategy is a key component of pbb Group's risk strategy. It is broken down into various modules (comprising various liquidity scenarios, given certain market conditions and stress parameters). This ensures that the Group's short- and medium-term funding is monitored and managed by means of a limit system. The limits are defined as part of the annual business planning process, approved by the Management Board.

Organisation of Liquidity Risk Management
RMC identifies, measures, reports and monitors liquidity risk. The Treasury department, which is independent from RMC, is responsible for managing liquidity risk. The processes and methods employed are reviewed on a regular basis by the Risk Committee and the Asset Liability Committee. Liquidity Risk cannot be calculated and reported at a business segment level.

Liquidity Risk Report
Liquidity management reports are prepared daily and submitted to the entire Management Board, as well as to the Joint Supervisory Teams (JSTs) of ECB and national competent authorities. The reports contain up-to-date information on the day's liquidity situation as well as forecasts made using contractual cash flows and in recognition of future events that could potentially influence liquidity developments.

Liquidity Risk Measurement and Limits

To manage liquidity risks, pbb has established a system for measuring and limiting short-term and medium-term variances within cash flows. This incorporates both contractual as well as optional cash flows. The data is subject to regular back-testing.

The liquidity position resulting from the liquidity reserve as well as contractual and optional cash flows is measured in different scenarios, with three liquidity positions being projected on a daily basis. The projections assume:

- unchanged market and funding conditions (base scenario),
- a risk scenario (modified [historical] stress scenario) and
- liquidity stress ([historical] stress scenario).

For instance, the risk and the (historical) stress scenario simulate possible client behaviour in "stress situations". Historical time series are used to calculate 95% and 99% quantiles.

Liquidity risk triggers (early warning indicators) have been defined for a 24-month horizon in the base scenario. Limits in the risk and the (historical) stress scenario are applicabel for a six- respectively three-month horizon.

The limit system consists of:

- limits relating to the liquidity stress profile (risk scenario and (historical) stress scenario); and
- triggers for the base scenario as well as the six-month bucket of [historical] stress-szenario.

In addition to reporting, pbb Group uses stress tests, conducted at regular intervals, for investigating the impact of additional stress events on the liquidity position.

Scenario analyses are performed to simulate the potential impact of crises attributable to macroeconomic, monetary policy or political crises on the liquidity situation.

The scenarios are reported to the Management Board, as well as to external bodies such as the Joint Supervisory Teams (JSTs) of ECB and national competent authorities.

Liquidity Risk Monitoring and Management

Monitoring of liquidity risks is ascertained through daily reporting of the liquidity situation and a defined escalation process. A liquidity emergency plan has also been adopted in this context; this plan forms the functional and organisational framework for the handling of any liquidity shortages. The liquidity emergency plan is part of the pbb Recovery Plan and updated at least annually.

Liquidity risk management is based on various interconnected components (daily and monthly liquidity reports), which are based on a "liquidity risk tolerance" defined by the Management Board. This ensures that pbb Group has adequate liquidity reserves at its disposal.

Hedging and Reduction of Liquidity Risk

A risk tolerance system is in place, to limit liquidity risk. Risk tolerance is integrated in the liquidity management process by means of triggers (limit system), in order to safeguard a "survival period" for pbb Group in stressed conditions.

The limits applicable for risk tolerance are determined in line with stress scenarios, and adjusted at regular intervals.

Development of pbb Group's Risk Position

The cumulative liquidity position (liquid assets plus projected net cash flows) determined as part of the liquidity risk measurement process as at 31 December 2019 amounted to €6.4 billion for a 12-month horizon in the base scenario – a €1.4 billion increase compared to the previous year (based on the same projection horizon). As at 31 December 2019, the cumulative liquidity position for a six-month horizon amounted to €2.9 billion in the risk scenario (31 December 2018: €2.6 billion). The cumulative liquidity position in the stress scenario for a six-month horizon amounted to €1.0 billion as of 31 December 2019 (31 December 2018: €0.9 billion).

Regulatory Liquidity Coverage Requirements (Liquidity Coverage Ratio, LCR)

The Liquidity Coverage Ratio (LCR) is calculated using the ratio of the liquidity buffer (liquid assets) to net liquidity outflows during a stress period of 30 days. A minimum LCR of 100% is mandatory in regulatory liquidity reporting.

The levels determined for pbb Group during 2019 were at any time clearly in excess of 100%. The Liquidity Coverage Ratio as at 31 December 2019 was 182%.

Funding Markets

Please refer to the chapter Development in financial position in the Report on the Economic position, for details concerning developments on funding markets and changes in pbb's funding volumes during the period under review.

Forecast Liquidity Requirement

In addition to the forecast liquidity requirement for new business activities, the extent of future liquidity requirements also depends on numerous external factors:

- further developments in the context of the European financial crisis and negotiations on Brexit and possible effects on the real economy;
- future developments of haircuts applied to securities for repo funding on the market, and with central banks;
- possible additional collateral requirements as a result of changing market parameters (such as interest rates and foreign exchange rates);
- developments in requirements for hedges;
- changed requirements from rating agencies regarding the necessary over-collateralisation in the cover pools;
- refinancing requirements of real estate investors

Funding Risk

The chapter "Internal Capital Adequacy Assessment Process (ICAAP)" provides details concerning funding risk as part of business and strategic risk.

Market Liquidity Risk

For financial instruments, quantitative details for a better assessment of market liquidity risk can be obtained from the presentation of the three levels of the fair value hierarchy in the notes. Generally, there is no intention to sell holdings measured at amortised cost for liquidity management purposes, as liquidity for these holdings can mainly be generated by way of including them in the cover pool, using the funding opportunities provided by the central bank, or using them in repo transactions. Market liquidity risk is included in the internal risk management process as part of market risk.

Opportunities
pbb Group's cumulative liquidity position of € 6.4 billion in the base scenario over a 12-month horizon, which is detailed in the section "Development of pbb Group's Risk Position", as at 31 December 2019 provides the Group with scope for a flexible response, particularly with regard to possible new business.

If the external factors specified in the section "Forecast Liquidity Requirement" were to develop favourably for pbb Group, this would result in a lower future liquidity requirement.

Operational Risk

Definition
According to Regulation 575/2013/EU (CRR) pbb defines the operational risk as follows: "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk". Furthermore, pbb recognises the following risks within the operational risk category: behavioural risk, reputational risk, outsourcing risk, model risk as well as risks associated with information and communication technologies (ICT systems risk).

Strategy for Operational Risk
The top priority of pbb Group's operational risk management is to prevent operational risk events and to meet the defined risk appetite. Key cornerstones of this strategy are the early recognition, systematic recording and assessment of operational risk, taking measures for risk mitigation as well as an early management reporting. The operational risk management strategy is adopted by the Management Board on an annual basis as part of the overall risk strategy. The risk strategy describes the risk management framework as well as pbb Group's measures regarding operational risk.

Organisation of Operational Risk Management
pbb Group has implemented a consistent Group-wide framework based on the principle of three lines of defence to manage operational risk. In this context, the risk owners – meaning heads of divisions – are responsible for managing operational risk, and for implementing risk-mitigating measures within the various business units (first line of defence). Specifically, Legal is responsible for managing legal risks, Finance for managing outsourcing risk, whilst the IT and Corporate Office divisions are responsible for managing ICT systems risk.

The Operational Risk unit in the RMC department represents the second line of defence which is responsible for uniform procedures and measures to identify, assess, quantify, monitor and report on operational risk. Internal Audit constitutes the third line of defence.

Risk Reports, Monitoring and Management of Operational Risk
Risk management is applied to all business processes in an overall approach. In particular, operational risk is analysed and considered explicitly as part of major decision-making processes (such as new product processes and outsourcing agreements).

Essential components of operational risk management are as follows: recording and analysing internal and external loss data, operational risk self-assessments (ORSA) and scenario-based analyses.

A structured and central reporting system is used to inform the Management Board and the division heads, the Risk Committee and other supervisory bodies concerning risk events on a regular, timely and comprehensive basis. Reports are prepared both ad-hoc (where material risk events are escalated) as well as on a monthly basis (Group Risk Report), on a quarterly (Key Risk Indicator Report) or annual (Annual OpRisk Report) basis, and are part of risk reporting to the entire Management Board, and the division heads. Operational risk reporting encompasses material loss events and near-losses, analyses of causes, top risk issues, development of risk indicators and of capital requirements, as well as the results from ORSA and scenario analyses.

Management of the ICT systems risk is fully integrated into operational risk management, and thus into the Bank's risk and compliance structure. Risk management for ICT systems risk generally applies at process level. The annual protection requirement analysis, the quarterly reporting of relevant information and metrics such as the key performance indicators (KPIs) as well as the IT security management, are all essential elements.

Management of legal risk, as performed by the Legal department, is aimed primarily at the prevention of losses which could be incurred if business activities of pbb Group were not documented with legal certainty. Structuring business activities in a manner that ensures legal certainty also serves to protect the integrity and reputation of pbb Group. In order to achieve this goal, the Legal department provides the entire pbb Group with a consultancy service.

The Legal department assists business divisions by monitoring developments in the relevant legislation and case law, and reviews the effects of such developments on new and existing business. The results are discussed with the responsible divisions and/or in the Legal and Regulatory Risk Committee. The Legal Policy describes the roles and responsibilities of the Legal department within pbb Group and serves as a guideline for employees in the Legal department.

Furthermore, the Legal department gives an assessment towards the respective business divisions whether provisions for pending legal cases have to be recognised. Provisions for legal risks are recognised in accordance with IAS 37 and section 249 HGB if (a) an obligation of pbb Group is probable, and (b) a reliable estimate can be made of the amount of the obligation. According to IAS 37.15, it is not clear whether there is a present obligation in rare cases. In such cases, pbb takes into account all available evidence, including the opinion of experts, to assess whether provisions have to be recognised at the reporting date.

Moreover, the OpRisk loss database captures losses from legal risks which need to be seen in conjunction with operational risk events. Overall, legal risks are taken into consideration in the existing operational risk management framework, and are an integral part of, inter alia, the Key Risk Indicator Report, the Operational Risk Self-Assessment (ORSA), the analysis and reporting of risk events, as well as for determining economic capital.

Risk Measurement

Please refer to the chapter "Internal Capital Adequacy Assessment Process (ICAAP)" for further details on the quantification of operational risk including legal risks as well as the calculation results of the economic capital for operational risk.

In line with the Standardised Approach according to article 317 et seq. of Regulation 575/2013/EU (CRR), the own funds requirement for operational risk, which is calculated at the end of each year, was € 70 million as at 31 December 2019 (31 December 2018: € 70 million).

Operational Risks Profile of pbb Group

pbb Group suffered a financial loss of €8 million from operational risks during 2019 (2018: €6 million). pbb assesses its operational risk profile as stable.

Opportunities

pbb Group aims to reduce potential operational risk to the extent possible, through continuous development of its operational risk framework and the ongoing optimisation of processes.

Business and strategic risk

Within pbb Group, business and strategic risk is defined as the risk of negative deviations of income and expenses from the planned figures – as a result of strategic decisions, false assumptions or unexpected changes in the external framework conditions, to the extent that such deviations are not covered by other risk types, such as market risk, credit risk or operational risk. Please refer to the chapter “Internal Capital Adequacy Assessment Process (ICAAP)” for further details on the quantification as well as the calculation results of the economic capital of business and strategic risk.

Property Risk

Property risk is defined as potential negative changes in the value of the Company’s own property portfolio, due to a deterioration of the general real estate situation or a negative change of the specific characteristics of the individual property – caused by the property being vacant, changed usage options, building damages, investment requirements, changes to the legal framework or economic environment as well as other factors.

As at 31 December 2019, pbb did not hold any own properties.

Pension risk

Pension risk is defined as the risk of incurring additional expenses due to insufficient capitalisation of pension obligations from defined benefit plans. It is considered within the scope of ICAAP. For details, please refer to the "Quantification of Economic Capital for Individual Risk Types" section.

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS (ICAAP)

Pursuant to section 91 (2) of the German Public Limited Companies Act (Aktiengesetz – “AktG”) and section 25a (1) of the German Banking Act (Kreditwesengesetz – “KWG”), pbb Group is obliged to establish appropriate and effective internal procedures in order to ensure the Bank’s risk-bearing capacity at all times. The Internal Capital Adequacy Assessment Process (ICAAP) is subject to regulatory review (within the framework of the Supervisory Review and Evaluation Process (SREP)); it complements the regulatory procedures under Pillar 1 of the Basel III framework, as laid down in the Capital Requirements Regulation (CRR) and the Fourth Capital Requirements Directive (CRD IV).

Pursuant to the “Multi-year plan on SSM Guides on ICAAP and ILAAP”, published by the European Central Bank in February 2017, and to the „ECB Guide to the internal capital adequacy assessment process (ICAAP)“, published in November 2018, regulatory authorities expect banks to apply two supplementary ICAAP perspectives: a normative and an economic perspective. Whilst the normative perspective is aimed at the fulfilment of all capital-related legal requirements, supervisory demands and internal objectives in the medium term, on an ongoing basis, the economic perspective covers all material risks which might threaten the institution's economic viability.

Both perspectives are designed to safeguard the financial institution's ability to survive: they are based on internal assessments of the capital required to safeguard the institution's continued existence. Both perspectives are implemented by pbb Group since 2018.

Within the normative perspective, capital-related regulatory and legal requirements comprise the CET1 ratio, tier 1 ratio, own funds ratio, Leverage Ratio, as well as rules concerning MREL (Minimum Requirements on Own Funds and Eligible Liabilities) and large loan exposure limits. Furthermore, pbb Group maintains transitionally the going-concern approach as an additional part of the normative perspective, since this is also geared towards protecting minimum regulatory capital ratios.

The economic perspective is an additional, parallel management approach on an equal footing that monitors capital on an ongoing basis, with reports submitted on a monthly basis. It aims to safeguard the economic viability of the institution, and is therefore geared towards maintaining the institution's net asset value. For this purpose, all material economic risks are viewed from a present value perspective, quantified as far as possible using models, and aggregated to economic capital. A confidence level of 99.9% is used in the economic perspective.

pbb Group has implemented a risk-bearing capacity analysis for both perspectives which, in addition to determining key regulatory indicators, also applies the concept of economic capital for risk quantification in both the going-concern approach and the economic perspective. Economic capital is defined as the capital required to cover the financial risks with a predefined probability (the confidence interval) over a one-year horizon. It is calculated for all relevant types of risk, and aggregated to form total economic capital (after diversification effects). The capital available to cover total risk is calculated in both approaches, and compared to economic capital.

The risks identified in the risk inventory as higher-level risks having an impact on capital and income – i. e. market risk, credit risk, business and strategic risk, operational risk and real estate risk – are included in the ICAAP, using models or other methods to quantify the economic capital of these risk types. Within these types of risk, there are additional sub-risks on a granular level which were taken into account in the ICAAP during the period under review. Certain material types of risk, such as extension risk, settlement risk, realisation risk for defaulted loans, or pension risk, are integrated into the ICAAP in the form of buffers which are validated on a regular basis. Funding risk is included in business and strategic risk.

Over and above the risk-bearing capacity analysis, the ICAAP comprises additional management tools, including a system of limits and early-warning thresholds, as well as a comprehensive monthly monitoring and reporting process. Moreover, key indicators selected within the scope of base and stress scenarios are projected over a period of up to three years, with limits and early-warning thresholds also assigned to these figures. Limit compliance, in combination with an effective escalation process, supports the continuous safeguarding of an appropriate capitalisation for pbb Group.

The results of the ICAAP and of the stress tests are regularly presented to the Management Board and the Risk Committee. The content of the risk-bearing capacity analysis are discussed there – if necessary, management measures are defined.

The methods of calculating economic capital for the individual risk types, as well as risk indicators as at the reporting date, are described in greater detail in the following sub-sections, and in the chapter "Result of Risk-bearing Capacity Analysis".

Quantification of economic capital for individual risk types

For internal assessment of the Internal Capital Adequacy Assessment Process in line with the economic perspective, and the going-concern approach of the normative perspective, economic capital for quantifiable risks is determined using models or scenario analyses, and aggregated into overall bank risk using a mathematical/statistical approach, taking specific correlations between market and counterparty credit risks into account. Thereby risks are calculated for a one-year period, using a confidence level of 99.9% for the economic perspective and 95% for the going-concern approach.

The methods of calculating economic capital for the individual material risk types for 2019 are explained below:

Economic capital for Credit Risk

For calculating the credit risk at the portfolio level, pbb Group uses a credit portfolio model which is based on the approach of a so-called asset value model. The fundamental concept used involves the repeated simulation of correlated rating migrations for borrowers, whereby the associated portfolio revaluation is used to derive a statistical distribution of losses – which is in turn used to derive economic capital in terms of unexpected losses. Economic capital quantifies the maximum unexpected loss, given a pre-defined confidence level, which may be incurred due to rating migrations (including defaults) in the lending business within a single year. Besides the loss distribution of the credit portfolio, as a significant result of this process, credit risk capital can be assigned to individual borrower units in line with the risks involved, using the so-called expected shortfall principle. This ensures a risk-adequate allocation to borrowers, and thus constitutes a major cornerstone in the risk-oriented management of the credit portfolio. During the observation period, correlations between borrowers, borrower groups and regions were reviewed during the course of the regular validation process; updated correlations were applied during the fourth quarter of 2019.

Credit risk reported comprises default and migration risk, transfer and conversion risk, as well as concentration risk. Certain elements of credit risk, such as the realisation risk for defaulted clients, settlement risk, and extension risk are not reported directly as part of credit risk, but are instead taken into account as deductions in the available financial resources. The credit portfolio model is used to examine the appropriateness of these deductions on a regular basis. Furthermore, tenant risk is backed by capital using a buffer for risks which can only be partially quantified, or which cannot be quantified at all.

Economic capital for Market Risk (including Pension Risk)

The purpose of calculating economic capital for market risk is to identify potential financial losses resulting from price changes affecting all positions. In this process, the potential non-systematic losses are derived from an analysis of historical time series of specific influencing factors (risk factors), including interest rates, exchange rates and credit spreads, over the preceding ten years. The historical observation period for risk factors underlying market risk calculations still comprises ten years, to ensure that adverse economic phases for the Bank are adequately taken into account, and captured by the model. Ultimately, using a simulation procedure and applying sensitivities of financial instruments to risk factors, the annual loss distribution of portfolio market value is determined, which allows to determine economic capital at the set confidence level.

Besides the risk types described in the “Market Risk” chapter, the ICAAP also encompasses pension risk, which is not disclosed directly in economic capital for market risk; instead, it is deducted from available financial resources in the form of a buffer, which is validated on a regular basis.

Economic capital for Operational Risk

Within the framework of the ICAAP, operational risk is quantified using the so-called loss distribution approach (LDA), whereby distributions for damage amounts and frequency are determined individually, using internal loss data from the loss database. External and scenario-based data is also included in the modelling approach. The full loss distribution is generated using Monte Carlo simulation techniques; diversification effects between the various sub-types of risk and modelling categories are not being considered. Furthermore, it is ensured that the economic capital figure calculated does not fall short of a specific floor. This floor is in line with the adjusted regulatory capital determined in accordance with the standardised approach pursuant to the EU Capital Requirements Regulation (575/2013 (EU) – "CRR"). Sub-types of operational risk which can only be partially quantified, or which cannot be quantified at all, such as for instance model risk, are covered by way of a capital buffer.

Economic capital for business and strategic risk

The quantification of business and strategic risk in the ICAAP is based on a mixed approach, consisting of a Monte Carlo simulation of net interest income and a scenario analysis for other items in the income statement. When deriving available financial resources, pbb Group does not consider any planned profits. This way, a buffer at least equivalent to the amount of positive projected results is reserved for business and strategic risk, since this type of risk is defined as the risk of potential negative deviations from planned income and expenses. In case higher than planned gains are calculated within the scope of quantifying business and strategic risk, the value of business and strategic risk exceeding the planned annual profit of pbb Group is reported as a risk amount.

Liquidity Risk in the ICAAP

Capital backing of liquidity risk in the narrower sense is not possible. Liquidity risk in the broader sense – i.e. the risk of higher funding costs for unexpected potential funding requirements, is mapped in economic capital for business and strategic risk.

Result of Risk-bearing Capacity Analysis

Normative perspective

For a detailed description of the regulatory indicators measured as at the reporting date (CET1 ratio, tier 1 ratio, own funds ratio, MREL and Leverage Ratio), please refer to the chapter "Key regulatory capital ratios". The readings for these indicators were non-critical at the reporting date. The future-oriented medium-term analysis of key capital ratios – as required by regulators – did not show any critical values according to the limit system, neither in the base scenario nor in the stress scenarios.

The internal goal of the normative perspective is to provide evidence of the Bank's risk-bearing capacity in accordance with the going-concern approach, whereby the economic capital is calculated using a confidence level of 95%. This management approach, which also aims to safeguard the minimum regulatory capital ratios, showed the following results:

Going-concern

in € million	31.12.2019	31.12.2018	Change
Credit risk	170	189	-19
Thereof Real Estate Finance	115	115	-
Thereof Public Investment Finance	2	4	-2
Thereof Value Portfolio	52	69	-17
Thereof Consolidation & Adjustments	1	1	-
Market risk	203	133	70
Operational risk	25	24	1
Business and strategic risk	-	-	-
Total before diversification effects	**398**	**346**	**52**
Total after diversification effects	**366**	**320**	**46**
Available financial resources (free capital)	1,251	1,419	-168
Excess capital	885	1,099	-214
Capital Adequacy Ratio in %	29	23	7

The main reason for the increase of the aggregate risk in 2019 was economic capital for market risk, which rose primarily due to the changed consideration of contractual floors for lending transactions in risk measurement, in line with the regulatory requirements stipulated by the EBA. Economic capital for credit risk declined slightly during the reporting period – above all, due to the decline in the VP segment which was largely driven by the sale of a Portuguese bond, and also by rating changes. Economic capital for operational risk is determined at least annually and has seen a minor increase, resulting from an improvement as well as an update of data used in the model. In total, these developments during the period under review led to an increase in aggregate risk after diversification effects.

Available financial resources (known as 'free capital') are compared to aggregate risk (after diversification effects). Available financial resources decreased during the reporting period, primarily due to an increase of the CET1 capital tied up for regulatory purposes which was mainly attributable to the increase of risk-weighted assets. Accordingly, the Bank had less CET1 capital available for covering economic risk at the reporting date compared to year-end 2018.

The increase of economic capital after diversification effects and the decline in available financial resources overall resulted in a decrease of excess capital and an increase in the risk-bearing capacity ratio (defined as the ratio of diversified economic capital to available financial resources). Overall, the Bank's risk-bearing capacity at the reporting date was evidenced under the going-concern approach.

Economic perspective

in € million	31.12.2019	31.12.2018	Change
Credit risk	1,183	1,245	-62
Thereof Real Estate Finance	598	567	31
Thereof Public Investment Finance	97	130	-33
Thereof Value Portfolio	478	526	-48
Thereof Consolidation & Adjustments	9	22	-13
Market risk	640	658	-18
Operational risk	97	85	12
Business and strategic risk	1	-	1
Total before diversification effects	**1,921**	**1,988**	**-67**
Total after diversification effects	**1,747**	**1,814**	**-67**
Available financial resources before net hidden losses	2,886	2,909	-23
Net hidden losses	-	-8	8
Available financial resources	**2,886**	**2,901**	**-15**
Excess capital	1,139	1,087	52
Capital Adequacy Ratio in %	61	63	-2

In the economic perspective, aggregate risk after diversification effects declined slightly during the period under review. Overall, economic capital for credit risk declined, primarily in VP, PIF and C&A, due to the regular parameter adjustments in the credit portfolio model and due to maturity effects. The increase in Real Estate Finance, which was largely driven by new business, higher loss given default, and parameter adjustments, partially offset the decline in credit risk. Market risk remained generally stable during the reporting period. A reduction could be observed that mainly resulted from credit spread risks, and which was primarily driven by roll-down effects. However, this movement was partially offset by the increase in the changed consideration of contractual floors for lending transactions in risk measurement, in line with EBA regulatory requirements. Economic capital for operational risk is determined at least annually, and has increased, resulting from an improvement as well as an update of data used in the model. In total, these developments during the period under review led to a decrease in aggregate risk after diversification effects.

This is contrasted by the available financial resources that changed only slightly in the reporting period and decreased somewhat. Compared to the year-end 2018, excess capital rose slightly, whilst the risk-bearing capacity ratio (defined as the ratio of diversified economic capital to available financial resources), decreased somewhat. Overall, the Bank's risk-bearing capacity at the reporting date was evidenced for the economic perspective as well.

Should credit spreads widen or credit ratings of European public debtors worsen, owing to economic or political developments, both a corresponding increase in credit risk and a reduction in available financial resources (given an increase in net hidden losses and lower equity) are to be expected, notwithstanding any countermeasures taken.

Opportunities

Additional economic catalysts would further narrow credit spreads and generally improve ratings, strengthening available financial resources again and hence, excess coverage in the ICAAP.

Stress testing

Stress tests play a major role, both from a supervisory perspective and for the Bank's internal management. All activities, developments and decisions relating to stress tests are brought together within the Stress Test Committee, which reports directly to the Risk Committee.

As part of an integrated approach, the impact of macroeconomic stress scenarios on the material metrics of the normative and economic perspectives was calculated for a horizon of several years during the period under review. These scenarios focus on the impact of trade barriers, as well as on an unfavourable development on the real estate markets.

Furthermore, stress tests relating to economic capital and available financial resources are used to obtain a deeper understanding of the sensitivity of risk-bearing capacity to adverse changes in economic factors. In addition, inverse stress tests are conducted regularly. The results of these tests describe specific constellations of parameters under which the risk-bearing capacity would be at risk.

SREP

The objective of the Supervisory Review and Evaluation Process ("SREP") is a comprehensive analysis of institutions supervised by the ECB – comprising an assessment of the business model, risk and corporate governance, risk situation, as well as capitalisation and liquidity status.

Based on the results of the analysis as well as using benchmark comparison, the ECB may impose minimum capitalisation or liquidity requirements, over and above existing regulatory requirements. As a material result of the SREP, as of 2019 (since 1 March 2019) pbb Group was required to maintain a minimum CET1 ratio of 9.5% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). This capital requirement is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (P2R: 2.5%) and the capital conservation buffer (CCB: 2.5%). Furthermore, pbb Group had to fulfil a total capital requirement of 13.0% in 2019 (since 1 March 2019; excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios). It is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum requirement (8.0%), a Pillar 2 capital requirement (2.5%) and the capital conservation buffer (2.5%). Both requirements, the Group complied with at all times during the year under review.

Towards the end of the year under review, the ECB notified pbb Group of the regular annual re-determination of minimum capital requirements for 2020. With effect from 1 January 2020, pbb Group has been required to continue maintaining a minimum CET1 ratio of 9.5% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2019, it stood at 0.34%). This capital requirement is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (P2R: 2.5%) and the capital conservation buffer (CCB: 2.5%). The CET1 minimum capital requirement that applies for 2019 also represents the threshold for mandatory calculation of a so-called maximum distributable amount (MDA). This generally limits distributions to the CET1 capital, new performance-based remuneration, and interest payments on additional Tier 1 capital (AT1 capital).

With effect from 1 January 2020 pbb Group has been required to continue maintaining a total capital requirement of 13.0% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2019, it stood at 0.34%). It is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum own funds requirement (8.0%), a Pillar 2 capital requirement (2.5%) and the capital conservation buffer (2.5%).

Key Regulatory Capital Ratios

Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (the Capital Requirements Regulation or "CRR") has been in force since 1 January 2014. Together with Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC (the Fourth Capital Requirements Directive or "CRD IV"), the CRR forms the basis for determining regulatory capital requirements. Besides the minimum capital ratios, these regulations also govern requirements for the eligibility of capital instruments as well as the mandatory determination of regulatory capital, in line with the accounting standards used. For this reason, pbb has determined its regulatory capital ratios based on IFRS since 1 January 2014.

With the approval of the European Central Bank (ECB) granted in December 2016, pbb Group uses the waiver rule pursuant to Article 7 (3) of the CRR; the Group is therefore exempt from determining own funds requirements at a single-entity level.

pbb Group applies the Advanced Internal Rating Based Approach (Advanced IRBA) and the Standardised Approach (STA) to determine regulatory capital requirements.

The requirements for regulatory capital ratios were satisfied at any time throughout the reporting period.

Owns Funds

in € million	31.12.2019 Basel III[1) 2)]	31.12.2018 Basel III[2) 3)]
CET1	2,690	2,698
Additional Tier 1	298	298
Tier 1	2,988	2,996
Tier 2	624	643
Own Funds	**3,612**	**3,639**

1) After confirmation of the 2019 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).
2) With the introduction of IFRS 9, the new rules governing the classification and measurement of financial assets and regarding the recognition of impairments have impacted regulatory capital. pbb has not applied the optional transitional provisions under IFRS 9.
3) After confirmation of the 2018 financial statements and appropriation of profits.

Risk-weighted assets (RWA)

in € million	31.12.2019 Basel III	31.12.2018 Basel III
Market risks	148	229
Thereof interest rate risks	-	-
Thereof foreign exchange risks	148	229
Operational risks	870	870
Credit risks	16,494	13,285
Thereof CVA Charge	239	262
Other RWA	209	203
RWA total	**17,721**	**14,587**

As expected and in accordance with the previous capital markets communications, risk-weighted assets (RWA) increased in the fourth quarter of 2019 to €17.7 billion at the end of the year. The reason for the increase was a higher risk weighting in strategic Commercial Real Estate Finance sub-portfolios, which was oriented on the new provisions set out by the European Banking Authority (EBA) and the Basel IV international banking framework. At the same time, pbb is also addressing the expectations of the capital market to take the pending regulatory changes into account at an early stage while smoothing out cyclical RWA fluctuations at the same time.

Banks use standardised approaches as well as internal, IRBA (Internal Rating Based Approach) rating models to determine the RWA. Within the scope of reviewing the internal model in conjunction with the Targeted Review of Internal Models (TRIM), pbb transferred sub-portfolios to the standardised approach in the fourth quarter; this mainly concerned loans to public-sector borrowers and financial institutions. In parallel to this, pbb revised the remaining IRBA models for the main portfolios in Commercial real Estate Finance in line with the regulatory requirements, particularly the EBA guidelines. This model revision is expected to be finalised in the course of 2020. The objective is to find a new model environment that significantly reduces the complexity. Targeted new risk weightings in the core portfolio were already taken into account as at 31 December 2019, where a higher calibration was applied to the loss given defaults (LGD). This had the effect of increasing the risk-weighted assets that pbb Group had set at an expected Basel-IV compliant level. Thanks to good capitalisation, the capital ratios also remain well above the regulatory requirements even after these changes were implemented. pbb Group will report RWA and capital ratios on this basis in future.

Capital ratios

in € million	31.12.2019 Basel III[1) 2)]	31.12.2018 Basel III[2) 3)]
CET1 ratio	15.2	18.5
Tier 1 ratio	16.9	20.5
Own funds ratio	20.4	24.9

[1)] After confirmation of the 2019 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).
[2)] With the introduction of IFRS 9, the new rules governing the classification and measurement of financial assets and regarding the recognition of impairments have impacted regulatory capital. pbb has not applied the optional transitional provisions under IFRS 9.
[3)] After confirmation of the 2018 financial statements and appropriation of profits.

Reverage ratio

in € million	31.12.2019 Basel III[1)]	31.12.2018 Basel III[2)]
Leverage ratio	5.4	5.3

[1)] After confirmation of the 2019 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).
[2)] After confirmation of the 2018 financial statements and appropriation of profits.

MREL (Minimum Requirements for Own Funds and Eligible Liabilities)

Under the recovery and resolution regime (pursuant to the Bank Recovery and Resolution Directive (BRRD) and Directive (EU) No. 879/2019 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC), institutions are required to maintain, in addition to regulatory capital, liabilities that can be converted to equity in the amount of the so-called MREL ratio. However, there are clear limits to the ability to convert liabilities (the 'bail-in capacity'). In particular, there is the principle that no investor may be placed in a less advantageous position than is permitted under regular insolvency proceedings (the principle of 'no creditor worse off' – or NCWO). For example, this means that deposits covered by a national deposit guarantee scheme are not bail-inable and thus excluded from conversion. The exact level of this ratio is determined by regulators individually for each institution concerned. pbb Group is aiming to maintain an MREL ratio of at least 8% in relation to total liabilities and own funds (TLOF), and – as in the previous year – exceeded this requirement significantly in the year under review.

Recovery and Resolution Planning

Recovery and Resolution Planning

A uniform bank resolution regime is a key component of European Banking Union. With the BRRD, which has harmonised recovery and resolution tools, and with the Regulation setting up the Single Resolution Mechanism ("SRM"), the legal basis therefore was established. In Germany, the BRRD was implemented through the German Act on Restructuring and Resolution (Sanierungs- und Abwicklungsgesetz – "SAG").

Recovery Planning

Pursuant to section 12 (1) of the SAG, every institution [subject to the Act] must prepare a recovery plan and submit it to the supervisory authorities. pbb Group's Recovery Plan is based on the Bank's accounting and financial reporting in accordance with IFRS; it takes numerous directives and regulations into account, including the BRRD, together with related directives and technical standards published by the European Banking Authority (EBA), the SRM, as well as the SAG. The objective of the Recovery Plan is to set out the measures that the institution may use in order to secure or restore its financial stability in the event of its assets, financial position and earnings materially deteriorating, in a theoretical crisis event, where such deterioration may threaten the institution's continued existence. A possible impact upon the financial sector as a whole is also considered in this context.

The monitoring of recovery indicators, as well as recovery governance, are enshrined within pbb Group's organisational as well as operating structures; they form part of the Bank's overall management.

The Recovery Plan is updated at least once a year, or on an event-driven basis, taking applicable regulatory requirements into account.

Resolution Planning
For institutions directly supervised by the ECB, the Single Resolution Board (SRB), based in Brussels, is responsible for resolution planning and has resolution powers. In this regard, the SRB cooperates with the national resolution authority (in Germany Bundesanstalt für Finanzdienstleistungsaufsicht/ resolution authority). pbb Group supports resolution authorities in their duty of preparing a resolution plan in accordance with the BRRD and the SAG.

INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM RELEVANT FOR THE CON-SOLIDATED FINANCIAL REPORTING PROCESS

Concept

The risk management system relevant for the consolidated financial reporting process comprise the principles, processes and measures used to ensure the effectiveness and efficiency of financial reporting, as well as to ensure compliance with statutory provisions. Risks that may prevent this overall objective from being achieved are identified and assessed; any risks identified are limited and their effect on the financial statements and their appropriate presentation are reviewed. The internal control system (ICS) is an integral part of the risk management system. The implementation of controls is intended to ensure, with sufficient certainty and despite the risks identified, that the financial statements are prepared in compliance with the regulations. However, absolute certainty regarding the achievement of the objectives cannot be given completely.

The ICS is fully integrated into the pbb Group's organizational structure and workflows. This also includes comprehensive reporting to the Management Board and Supervisory Board and appropriate information to the Group Finance Committee (GFC).

pbb's Management Board prepares Consolidated Financial Statements and a Combined Management Report. In connection with the requirement to establish a Group-wide ICS, the whole Management Board of pbb is also responsible for the form – i.e. the concept, implementation, maintenance and monitoring – of an appropriate and effective ICS. All strategies are decided on by the whole Management Board on the basis of recommendations made by the CEO/CFO or the GFC.

The Supervisory Board is tasked with advising and monitoring the Management Board. It also has audit and reporting-related obligations. pbb's Supervisory Board established an Audit Committee to support its activities in this area. In accordance with section 100 (5) of the Aktiengesetz (AktG – German Stock Corporation Act), at least one member of the Supervisory Board must have expertise in accounting or auditing. Pursuant to the so-called EU Audit Reform, pbb's Audit Committee will have to comply with stricter requirements, with effect from 17 June 2016: for example, the committee as a whole needs to have extensive knowledge of the banking sector (the concept of "sector competence"). Given the relevant professional experience of every Audit Committee member, the Committee already has the sector competence which will be required in the future.

Group Internal Audit supports the Management Board and the Supervisory Board in its control function by performing independent audits.

At 31 December 2019, the CEO/CFO was responsible for Communications, Corporate Office/Corporate Development, Digitalisation, Finance, Group Internal Audit, Human Resources and Legal. The Finance division comprises the Accounting, Financial Reporting, Procurement Services & Corporate Controlling, Regulatory Reporting, Tax department as well as the cross-functional Data Governance. The Finance division prepares the Consolidated Financial Statements in accordance with IFRS as applicable in the EU and provides the capital market information relevant to accounting. pbb Group companies and branches prepare their financial statements in accordance with the relevant local legal requirements. These financial statements are standardised around uniform Group accounting policies in accordance with IFRS for the purposes of Group financial reporting. Each entity included in the Consolidated Financial Statements reports its statement of financial position, income statement, and notes to a central department in Group Accounting via the consolidation software. In Group Accounting the data are validated, analysed and consolidated. For the preparation of the unconsolidated annual financial statements, the accounting policies in accordance with the German Commercial Code (Handelsgesetzbuch, HGB) applied for the financial statements of the corporate headquarters and the branch offices, and are harmonised on the basis of a HGB accounting manual.

The GFC issues recommendations to the Management Board. These include, among other things, establishing and monitoring the accounting and reporting policies as well as workflows for all units and segments. The GFC is composed of the members of the Management Board and the managers of the Finance, Risk Management & Control and Treasury divisions.

With respect to workflows, the ICS is based on the objective of largely standardised the processes and software. Core activities and processes are governed by policies, according to which the four eye principle must be applied in all material transactions. Data and IT systems are protected against unauthorised access. In addition, certain relevant information is only made available to those employees who need it for their work. Where necessary, results are agreed at Group level.

Implementation

In order to strengthen and further expand the ICS, pbb Group has, among other things, implemented the Control Attestation Process (CAP). As part of this process, all divisions define key controls for managing their significant risks. The key controls are reviewed and confirmed in a regular confirmation process by the divisions. In addition, the controls are reviewed in a downstream process by the Compliance and Group Internal Audit divisions.

There is a clear separation of functions within the Finance division. The GFC and other committees, as well as divisional meetings serve as overarching links between the different tasks. In addition, executing, accounting and administrative activities such as payment transfers and payment entries are clearly separated or subject to the four eye principle. Furthermore, the units included in the Consolidated Financial Statements report their data to a central Group department, ensuring the subsequent processing in a uniform manner.

Systems-based and non-systems-based risk management measures and internal controls are used within the workflows. At the systems level, standard software is used as far as possible to post, reconcile, check and report data so as to avoid errors. The same applies to consolidation, which is performed using standard market software. The consolidation software supports the reconciliation of intragroup transactions at a technical level in a clearly defined process, ensuring that these transactions are eliminated correctly and in full. Data from the entities included in the Consolidated Financial Statements are reported using a uniform, standardised chart of accounts. Automated plausibility checks are performed on the data reported by subsidiaries for consolidation purposes, for example. The largest part of assets and liabilities is held by the parent company pbb. The balances carried forward are checked by the system. To prevent data loss, the data in the consolidation software are backed up on a daily basis and the backup is stored on tape. As a general rule, pbb Group's software is protected against unauthorised access by a clearly defined administration concept and authorisation rules.

Alongside the systems-based measures, pbb Group has implemented manual and non-systemsbased processes. For example, the correctness and completeness of the data reported are checked using a standardised process involving variance analyses over time, among other things. In addition, the consolidated statement of financial position and the consolidated income statement are determined on a monthly basis. Projections and forecasts are also drawn up. As part of another control mechanism, the exposures involving financial instruments – and hence the vast majority of the statement of financial position – are broken down to individual transaction level based on sub-ledgers, and are reconciled with the consolidated figures. In the statement of profit or loss, for example, net interest income and net fee and commission income are tracked within the context of the earnings transparency analysis, and the result from fair value measurement is tracked within the context of monthly analyses on the basis of the individual transactions in the sub-ledgers. Another reconciliation refers to the general and administrative expenses where the consolidated figure is reconciled to the individual accounts in the sub-ledger. In addition, a plausibility check using a control file is conducted regarding capital consolidation, in addition to the automated, standard system-based consolidation on individual entry level.

Group wide mandatory accounting requirements are defined and communicated, amongst others, by the use of an accounting manual. These requirements, which include the analysis and interpretation of new and existing IFRS standards and interpretations, enable a group wide consistent accounting and measurement. Generally accepted valuation methodologies are employed. The procedures in place and the underlying parameters are monitored on a regular basis and adjusted if necessary.

In order to improve the quality of controls, various divisions are integrated in certain processes and are required to reconcile. For example, the interdepartmental new product process and the review of existing products (with a right of veto by the divisions Finance and Risk Management & Control) are designed to ensure that products are recognised in the financial reporting in a uniform and systematic manner. In addition, the processes of the market valuations undertaken by Risk Management & Control are coordinated in the GFC. Annual and interim report preparation is another example of interdepartmental coordination. All of the areas involved must sign off on these reports before they are officially prepared by the Management Board (subcertification process), creating an additional level of control for the products to be disclosed. All of the divisions affected agree in advance on the content of material sections of the annual and interim reports in editorial meetings.

pbb Group takes measures to combat fraud and intentional violations that negatively impact the Group. Fraud includes theft, embezzlement, or breach of fiduciary duty, as well as intentional accounting errors in connection with the consolidated financial reporting process.

Maintenance

In order to ensure that risks are identified, evaluated and limited as correctly and comprehensively as possible, pbb Group continually reviews and improves its ICS, including at meetings of the GFC. This also involves adjustments to the ICS to reflect new circumstances, such as changes in the structure and business model of pbb Group or new satutory requirements.

The risk of fraud and intentional violations is regularly analysed in order to take defensive measures. Factors taken into account include suspicious events and changes in pbb Group's situation and that of individual employees.

Any changes to processes and IT systems required as a result of legislative amendments are implemented as separate interdepartmental projects with a clear allocation of functions. At the same time, the IKS is also adapted to the changes in the provisions.

Monitoring

The Group Internal Audit division is in particular responsible for checking that processes and procedures are carried out in a due and proper manner and identifying inefficiencies, irregularities or manipulation. The Group Internal Audit division also reviews the effectiveness and appropriateness of the IKS in an independent and risk-oriented manner in line with the rules set out in the Minimum Requirements for Risk Management (MaRisk), and identifies any weaknesses in risk identification, assessment and mitigation. This also includes reviewing the IT systems and the processes and controls of the Finance functions. Concrete action plans with specific deadlines are drawn up and their implementation monitored to remedy the identified shortcomings. Group Internal Audit as an independent division is not integrated into the workflow, nor is it responsible for the results of the audited process. In order to be able to carry out its duties, Group Internal Audit has a full and unrestricted right to information on activities, processes and the IT systems.

As the body responsible for supervising and advising the Management Board, the Supervisory Board may inspect and examine the Company's books and assets in accordance with section 111 (2) of the AktG. In addition, the Management Board reports regularly to the Supervisory Board. Group Internal Audit reports to the whole Management Board and the Audit Committee of the Supervisory Board at appropriate intervals, however, at least quarterly. In accordance of section 25 d (8) of the German Banking Act (Kreditwesengesetz) the Chairman of the Audit Committee can directly obtain information from the heads of Group Internal Audit and Risk Management & Control. The Supervisory Board discusses the IKS. The Supervisory Board appoints the auditors of the Consolidated Financial Statements, the Unconsolidated Financial Statements and the Combined Management Report. The Supervisory Board approves the Consolidated Financial Statements and the Combined Management Report prepared by the Management Board and audited by the independent auditors.

The auditors of the financial statements attend the Supervisory Board meetings relating to the financial statements and all of the meetings of pbb Group's Audit Committee to report on the material findings of their audit including material weaknesses in the IKS. Where relevant, the auditors immediately eport findings and issues that emerge during the audit and that are material for Supervisory Board to carry out their duties. The Supervisory Board discusses the focus of the audit with the auditors in advance.

Remuneration Report

The Remuneration Report follows the recommendations of the German Corporate Governance Code (the "Code" or "GCGC") in its latest version and includes the information required pursuant to the German Commercial Code (Handelsgesetzbuch – "HGB") and in accordance with the International Financial Reporting Standards (IFRS). In line with applicable transition rules, the new statutory provisions governing the content and disclosure requirements of remuneration reports pursuant to the German Act Implementing the Second Shareholder Rights Directive ("ARUG II") dated 19 December 2019, as laid out in section 162 of the AktG, are to be initially applied with regard to the remuneration report for the 2021 financial year.

The first section of the Remuneration Report describes the structure, specifications and amount of remuneration for members of the Management Board and Supervisory Board. The second section of the Remuneration Report provides information on the remuneration system and the remuneration structure for employees of the pbb Group. However, this remuneration report does not comprise any quantitative remuneration information on employees, to be disclosed in compliance with Article 450 of the Capital Requirements Regulation ("CRR") in conjunction with section 16 of the German Regulation on Remuneration in Financial Institutions (Institutsvergütungsverordnung – "InstVergV"). This information is scheduled to be disclosed after completion of the 2019 remuneration review (variable remuneration not yet established) during the second quarter of 2020, as part of pbb's Remuneration Report (according to the InstVergV). This information will be available online under www.pfandbriefbank.com as soon as the remuneration review is completed. The third section of the Remuneration Report comprises information on the governance structure regarding remuneration.

REMUNERATION SYSTEM AND REMUNERATION STRATEGY OF THE PBB GROUP

The remuneration system and the remuneration strategy of pbb Group are integral components of the Group's business and risk strategy. The remuneration strategy sets out the framework for the performance and remuneration of Management Board members and employees of the pbb Group. The remuneration strategy was developed as part of the business and risk strategy, involving the relevant business divisions and the Remuneration Officer. All employees of pbb Group have access to the remuneration strategy – updated in 2019 – via the intranet. The remuneration strategy is subject to regular revision, and may be subject to extraordinary revision particularly in case of amendments to the business and risk strategy.

The system aims to guarantee a performance-oriented and appropriate remuneration – one that is geared to achieving the targets enshrined in the business and risk strategy. pbb's business management is targeted towards a sustainable enhancement of profitability, whilst maintaining the Group's strict risk policy. Performance measurement at institutional level is one of the key elements in achieving these objectives. Referring to performance measurement at institutional level, particular attention is given to (key) performance indicators – as defined within the business and risk strategy as well as business planning – which particularly reflect the defined business and risk strategy, fulfil all regulatory requirements regarding risk, capital and liquidity, and are transparent as well as comprehensible. The performance at institutional level, derived from the performance indicators, forms the basis for the total variable remuneration available for disbursement. Hence, variable remuneration of Management Board members and all employees is directly linked to – and driven by – the business and risk strategy. Moreover, this guarantees compatibility of the remuneration system with the Group's capital and liquidity planning, as stipulated in the applicable regulatory requirements. Performance measurement comprises two other performance levels: division performance and individual performance. Targets for these subsequent performance levels will be derived from the business and risk strategy.

The remuneration strategy is an integral part of the personnel strategy. pbb's business model requires highly qualified employees with expert knowledge. The key objective of pbb Group's strategy therefore is to attract, retain and develop – for the long term – highly qualified employees with expert knowledge, strong quality awareness, customer focus, leadership skills, the willingness to be deployed

flexibly, and an advanced degree of entrepreneurial thinking. Capable and dedicated employees are key to increasing income by generating profitable new business in line with the strict risk policy. Besides the Group's differentiated personnel planning, its recruiting strategy and the diversified internal and external qualification programmes, implementation of the Group's personnel strategy is based on variable remuneration, featuring incentives for individual performance, and promoting cooperation between business divisions, departments and teams. With the variable remuneration components, employees have the chance to participate directly in the success of pbb Group.

Implementation of regulatory requirements regarding remuneration systems of banks is another key element in the remuneration strategy. The aim of pbb's remuneration system is to reflect the basic principle of appropriateness regarding the amount and structure of individual remuneration components. Another goal is to avoid incentives for taking disproportionately high risks. Going forward, total remuneration amounts, and individual remuneration elements will be subject to regular revision in order to establish an appropriate relationship of remuneration to function and performance, as well as to pbb Group's overall performance.

Considering the German Act Implementing the Second Shareholder Rights Directive ("ARUG II") dated 19 December 2019, pbb Group will carry out a review during the financial year 2020 to assess if and to what extent the remuneration system for the members of the Management Board must be adjusted to fulfil the new statutory provisions, in particular section 87a of the AktG. pbb Group will submit to the Annual General Meeting following 31 December 2020 an – if need be – adjusted remuneration system for resolution in accordance with statutory provisions resulting from section 120a of the AktG.

MANAGEMENT BOARD

Principles

In principle, remuneration for members of pbb's Management Board is designed to ensure a performance-oriented payment, taking the Company's size and international business activities into account. Besides a peer review, based on remuneration for Management Boards and senior management roles in similar companies in Germany and abroad, and a comparison to remuneration of all other employees of pbb Group, the Company's financial situation and performance is also taken into account. In this context, pbb Group carries out an annual review of the appropriateness of the remuneration system, the remuneration structure, as well as remuneration levels. In terms of the horizontal remuneration review, pbb takes the following peer group into account (effective November 2019):

- Deutsche Hypothekenbank (Actien-Gesellschaft)
- Berlin Hyp AG
- Münchener Hypothekenbank eG
- Aareal Bank AG
- DZ HYP AG
- Landesbank Hessen-Thüringen Girozentrale
- Landesbank Baden-Württemberg
- UniCredit Bank AG
- Commerzbank AG
- DZ Bank AG

Remuneration Components

The service contracts entered into with the members of the Management Board comprise the following remuneration elements:

- non-performance related (monetary) remuneration plus non-cash remuneration;
- performance-related variable remuneration;
- pension commitment.

The Remuneration Oversight Committee and the plenary meeting of the Supervisory Board discussed the amount, structure and appropriateness of Management Board remuneration in 2019, also involving external advisors.

Non-performance-related Remuneration

Fixed remuneration levels are reviewed, and adjusted if appropriate, at regular intervals, using an external market survey. No automatic adjustment will take place. In 2019, fixed remuneration amounted to € 500,000 gross per annum for each Management Board member.

In addition, the Company granted fringe benefits (non-cash benefits) to the members of the Management Board which are within customary scope. These non-cash benefits include the provision of a company car (including driver), whereby the Company covers all costs incurred in this respect. Where a member of the Management Board was required to maintain a second household, the Company paid the cost for the second apartment at the place of work, for a maximum of two years. Moreover, the Company has taken out a group accident insurance policy for the members of the Management Board. The Management Board members pay taxes due on these benefits in kind.

Performance-related Variable Remuneration

pbb's variable remuneration system is in line with the regulatory requirements as set out in the CRD IV, the German Banking Act (Kreditwesengesetz – "KWG") and the requirements of the German Stock Corporation Act (Aktiengesetz – "AktG"), and the German Corporate Governance Code (the "GCGC"). Regarding potential deviations from the GCGC, please refer to the declaration of compliance in accordance with section 161 of the AktG. In 2020, pbb will carry out a review regarding potential adjustments of the remuneration system as a consequence of the Second Shareholder Rights Directive ("ARUG II") dated 19 December 2019.

Variable remuneration is paid in cash. Half of the amount of variable remuneration depends on the performance of the pbb share (share-based remuneration system). As in previous years, pbb Group did not grant any share options to Management Board members in 2019.

The variable remuneration component is determined on the basis of an individual calculatory reference value. This is a reference value which reflects the amount of variable remuneration attributed to a performance level of 100% on all relevant performance levels. The calculatory reference value for 2019 has been set at €240,000 for the Chairman of the Management Board, and at €200,000 for all other Management Board members. The calculatory reference value for 2020 was set at €315,000 for the Chairman of the Management Board, and at €240,000 for all other Management Board members. The adjustment of calculatory reference values for ordinary Management Board members follows the overall development customary in the market. By increasing the calculatory reference value of the Chairman of the Management Board, pbb is taking appropriate account of the customary difference in remuneration between the Chairman of the Management Board and other Management Board members, and follows the overall development customary in the market regarding the remuneration of Management Board chairmen.

The variable remuneration granted to each Management Board member is capped at 150% of his/her individual calculatory reference value.

According to section 25a (5) sentence 2 of the KWG, the variable remuneration may not exceed 100% of fixed remuneration. According to section 25a (5) sentence 5 of the KWG, pbb's Annual General Meeting may increase this threshold to 200% of fixed remuneration. However, no such resolution was taken by pbb's Annual General Meeting so far.

The service contracts entered into with the members of the Management Board comprise a total threshold value. According to these contractual stipulations, the total remuneration for the Chairman of the Management Board for a given calendar year (2019) is capped at €910,000, and at €850,000 for all other Management Board members, including basic remuneration, variable remuneration and fringe benefits. Reflecting the increased calculatory reference values, pbb will adjust the total

threshold value for the Chairman of the Management Board to a maximum amount of €1,022,500, and for all other Management Board members to a maximum amount of €910,000, from 2020.

Examination of Requirements according to section 7 of the InstVergV
Granting of variable remuneration to Management Board members is subject to the prior determination of a total amount of variable remuneration by the Supervisory Board (taking into account the requirements of section 7 of the InstVergV). This amount is determined at the end of each financial year, within the framework of a formal and transparent process. The Supervisory Board approved the variable remuneration to be granted for 2019 as part of its review in 2020. For the examination of requirements according to section 7 of the InstVergV, pbb uses relevant recovery threshold values as indicators in line with the reporting on recovery and resolution plans (SRM-VO/SAG). Provided all requirements were fulfilled, and the Group disclosed (positive) consolidated profit in its IFRS financial statements, a total amount available for disbursement as variable remuneration is then determined. In the event of a net loss it is unlikely that the full amount would be earmarked for variable remuneration.

Performance Measurement
The amount of variable remuneration for 2019 is determined on three levels: (i) the institution's performance, (ii) the performance of the organisational unit (the Management Board member's respective division) and (iii) the Management Board member's individual performance.

As the first step of performance measurement, the calculatory reference values (as adjusted through the determination of the total amount of variable remuneration) are distributed among the three performance measurement levels. Since 2019, 60% is allocated to the institution's performance, while 40% is allocated to the performance of the organisational unit and the individual performance taken together. On this basis, the performance achieved at the institutional, divisional, and individual levels is evaluated, and a specific share of the calculatory reference value is calculated and allocated to the respective member of the Management Board (envisaged personal reward value – "EPR value").

The Supervisory Board reviewed and approved the 2019 target agreements with Management Board members in November 2018. As part of the corresponding performance determination, the Supervisory Board also reviewed and approved the institutional targets, the divisional targets and the individual targets, and established the level of target achievement in February 2020. As in the previous year, the institution's performance for 2019 was calculated as follows: the level of target achievement for the (adjusted) IFRS consolidated profit before tax, plus the level of target achievement for the risk-reward profile, determined as the ratio between net margin x average portfolio volume and risk-weighted assets. At an institutional level, target achievement may be subject to additional modifiers. The list of modifiers includes, for instance: short-term changes of regulatory requirements considered material to pbb Group, short-term macroeconomic events, foreign trade limitations and one-off effects due to the acquisition or disposal of material business units, particularly in the case of external M&A activities.

The target achievement at institutional level relevant to the variable remuneration in 2019 depends on the institution's performance in the financial years 2017, 2017 and 2019 – each year contributing 33% to overall target achievement, respectively. Against this background, the variable remuneration has a multiple-year assessment basis as well, and relates to the long-term success of the pbb Group, in addition to the multiple-year retention period for variable remuneration and the share-based sustainability component.

The divisional and individual targets were derived from the corporate targets and the business plans made for the respective financial year. In 2019, the target agreements with the Management Board members comprised targets on new business, risk management and funding, and – once again – particularly targets regarding strategic projects, such as the investment strategy and digitalisation of pbb Group, talent acquisition and promotion, promotion of women and personnel development, broadening and diversifying pbb's investor base, further developing pbb's business model, and extension of client relationships.

Disbursement Structure
As a significant institution as defined by section 17 of the InstVergV, pbb must in particular observe the requirements of section 20 of the InstVergV regarding variable remuneration of risk takers. Management Board members are risk takers. The disbursement structure of the variable remuneration for Management Board members is therefore generally subject to the following conditions:

The EPR value is broken down into a disbursement portion and a deferral portion, whereby the purpose of the latter includes establishing a multi-year assessment basis and thus – just like the multi-year measurement of Company success – gears the variable remuneration of the Management Board members upon the Company's long-term performance.

The disbursement for Management Board members amounts to 40% of their personal EPR value, with the deferral portion amounting to 60%. 50% of the disbursement amount is paid out in cash when the conditions for disbursement have been met. The remaining 50% is disbursed after a retention period of one year, after the amount was adjusted in line with the performance of the pbb share (virtual shares; no physical share option programme). The applicable amount is translated into the corresponding number of virtual shares. The calculation of the number of virtual shares is based on the average Xetra closing price of the pbb share in February of the year subsequent to the financial year for which the variable remuneration is granted (subscription price). The resulting number of virtual shares is automatically converted into a cash amount after a retention period of one year, and paid out with the variable remuneration of the disbursement year. The conversion is based on the average Xetra closing price of the pbb share in February of the disbursement year (disbursement price). The EPR value portions linked to the sustainability component are granted on the basis of the performance of the pbb share during the retention period.

The deferral period for the deferral portion due to Management Board members is five years. In the five years following establishment of the EPR value, the Supervisory Board takes a resolution, every year, regarding the granting of one fifth of the deferral portion. The beneficiary may not claim the relevant remuneration component until the end of each deferral period. As soon as the Management Board members have the right to claim a deferred remuneration component, half of the respective deferral portion is paid out in cash. Another retention period of one year applies to the other half of the respective deferral portion, during which it is subject to the sustainable performance of the pbb share according to the sustainability component described earlier.

When granting deferral portions, the Supervisory Board takes into account – as part of a retrospective review of the variable remuneration (ex-post risk adjustment) – any subsequent negative deviations affecting the performance of the institution, the organisational unit, or the individual Management Board member (back-testing) as well as unethical behaviour or behaviour in breach of duties, negative performance contributions within the meaning of section 18 (5) of the InstVergV (malus verification), and the relevant financial conditions for disbursement (pursuant to section 7 of the InstVergV).

Therefore, half of the variable remuneration of Management Board members is linked to the performance of the pbb share price as part of the sustainability component.

Effective 1 January 2018, the conditions to apply clawback options for variable remuneration already paid out was contractually agreed upon with all Management Board members. According to the contractual stipulations, clawbacks particularly apply if a Management Board member was significantly involved in, or was responsible for, any behaviour which led to considerable losses, or material regulatory sanctions, for the Bank. The same applies if a Management Board member breached external or internal provisions related to suitability and conduct to a serious degree. In its specific implementation of the InstVergV criteria for clawback purposes, pbb Group considers and applies all regulatory requirements, taking the distinctive features of pbb Group's business model and risk profile into account, and reflecting the overall sustainability aspects of the Company's performance – as well as the synchronisation of Company performance and bonus payments. Clawbacks may be applied up to seven years after the disbursement amount of variable remuneration was paid out.

Conclusion and Termination of Service Contracts

No new service contracts were concluded and no service contracts were terminated in 2019.

Disclosure of Management Board remuneration in accordance with the German Corporate Governance Code

With the publication of the revised GCGC dated 16 December 2019, the sample tables (currently) attached to the GCGC were removed without substitution. However, pbb resolved to still use the sample tables for 2019 in order to ensure disclosure continuity irrespective from the actual effective date of the revised GCGC. Therefore, this report provides the following disclosures, as before: for each current Management Board member in the 2019 financial year, (i) the benefits abstractly granted (including target or expected values), as well as (ii) the actual cash flow received (i.e. the actual amounts disbursed). Both benefits and allocations must be broken down by fixed remuneration, non-cash benefits, variable remuneration and pension expenses (service cost as defined under IAS 19). For reasons of clarity, these details have been compiled into a single table for each member of the Management Board in office during 2019.

Andreas Arndt

CEO/CFO	Benefits granted				Allocation	
in € thousand	**2019**	Minimum	Maximum	**2018**	**2019**	**2018**
Fixed remuneration	500	500	500	500	500	500
Fringe benefits[1]	11	11	11	13	11	13
Total	**511**	**511**	**511**	**513**	**511**	**513**
One-year variable remuneration for 2019	57	-	72	-	-	-
Multi-year variable remuneration for 2019						
Disbursement portion subject to holding period 2019 (second quarter 2021)[2]	57	-	72	-	-	-
Deferral 2019 (second quarter 2021)[2]	34	-	43	-	-	-
Deferral 2019 (second quarter 2022)[2]	34	-	43	-	-	-
Deferral 2019 (second quarter 2023)[2]	34	-	43	-	-	-
Deferral 2019 (second quarter 2024)[2]	34	-	43	-	-	-
Deferral 2019 (second quarter 2025)[2]	34	-	43	-	-	-
One-year variable remuneration for 2018	-	-	-	60	60	-
Multi-year variable remuneration for 2018						
Disbursement portion subject to holding period 2018 (second quarter 2020)	-	-	-	60	-	-
Deferral 2018 (second quarter 2020)	-	-	-	36	-	-
Deferral 2018 (second quarter 2021)	-	-	-	36	-	-
Deferral 2018 (second quarter 2022)	-	-	-	36	-	-
Deferral 2018 (second quarter 2023)	-	-	-	36	-	-
Deferral 2019 (second quarter 2024)	-	-	-	36	-	-
One-year variable remuneration for 2017	-	-	-	-	-	50
Multi-year variable remuneration for 2017						
Disbursement portion subject to holding period 2017 (second quarter 2019)	-	-	-	-	36	-
Deferral 2017 (second quarter 2019)	-	-	-	-	15	-
Multi-year variable remuneration for 2016						
Disbursement portion subject to holding period 2016 (second quarter 2018)	-	-	-	-	-	72
Deferral 2016 (second quarter 2018)	-	-	-	-	15	15
Deferral 2016 (second quarter 2019)	-	-	-	-	15	-
Total	**795**	**511**	**870**	**813**	**652**	**650**
Services[3]	640	640	640	631	640	631
Total remuneration	1,435	1,151	1,510	1,444	1,292	1,281

[1] Including taxable non-cash benefits within the customary scope.
[2] The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.
[3] Service expenses according to the German Commercial Code (HGB) amounted to € 646,000 in 2019 (2018: € 503,000).

Thomas Köntgen

Deputy CEO
Commercial Real Estate Clients

	Benefits granted				Allocation	
in € thousand	**2019**	Minimum	Maximum	**2018**	**2019**	**2018**
Fixed remuneration	500	500	500	500	500	500
Fringe benefits[1]	18	18	18	19	18	19
Total	**518**	**518**	**518**	**519**	**518**	**519**
One-year variable remuneration for 2019	49	-	60	-	-	-
Multi-year variable remuneration for 2019						
Disbursement portion subject to holding period 2019 (second quarter 2021)[2]	49	-	60	-	-	-
Deferral 2019 (second quarter 2021)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2022)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2023)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2024)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2025)[2]	29	-	36	-	-	-
One-year variable remuneration for 2018	-	-	-	50	50	-
Multi-year variable remuneration for 2018						
Disbursement portion subject to holding period 2018 (second quarter 2020)	-	-	-	50	-	-
Deferral 2018 (second quarter 2020)	-	-	-	30	-	-
Deferral 2018 (second quarter 2021)	-	-	-	30	-	-
Deferral 2018 (second quarter 2022)	-	-	-	30	-	-
Deferral 2018 (second quarter 2023)	-	-	-	30	-	-
Deferral 2019 (second quarter 2024)	-	-	-	30	-	-
One-year variable remuneration for 2017	-	-	-	-	-	50
Multi-year variable remuneration for 2017						
Disbursement portion subject to holding period 2017 (second quarter 2019)	-	-	-	-	36	-
Deferral 2017 (second quarter 2019)	-	-	-	-	15	-
Multi-year variable remuneration for 2016						
Disbursement portion subject to holding period 2016 (second quarter 2018)	-	-	-	-	-	72
Deferral 2016 (second quarter 2018)	-	-	-	-	15	15
Deferral 2016 (second quarter 2019)	-	-	-	-	15	-
Total	**761**	**518**	**818**	**769**	**649**	**656**
Services[3]	572	572	572	583	572	583
Total remuneration	1,333	1,090	1,390	1,352	1,221	1,239

[1] Including taxable non-cash benefits within the customary scope.
[2] The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.
[3] Service expenses according to the German Commercial Code (HGB) amounted to € 524,000 in 2019 (2018: € 388,000).

Andreas Schenk

CRO

in € thousand	Benefits granted				Allocation	
	2019	Minimum	Maximum	**2018**	**2019**	**2018**
Fixed remuneration	500	500	500	500	500	500
Fringe benefits[1]	10	10	10	9	10	9
Total	**510**	**510**	**510**	**509**	**510**	**509**
One-year variable remuneration for 2019	48	-	60	-	-	-
Multi-year variable remuneration for 2019						
Disbursement portion subject to holding period 2019 (second quarter 2021)[2]	48	-	60	-	-	-
Deferral 2019 (second quarter 2021)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2022)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2023)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2024)[2]	29	-	36	-	-	-
Deferral 2019 (second quarter 2025)[2]	29	-	36	-	-	-
One-year variable remuneration for 2018	-	-	-	50	50	-
Multi-year variable remuneration for 2018						
Disbursement portion subject to holding period 2018 (second quarter 2020)	-	-	-	50	-	-
Deferral 2018 (second quarter 2020)	-	-	-	30	-	-
Deferral 2018 (second quarter 2021)	-	-	-	30	-	-
Deferral 2018 (second quarter 2022)	-	-	-	30	-	-
Deferral 2018 (second quarter 2023)	-	-	-	30	-	-
Deferral 2019 (second quarter 2024)	-	-	-	30	-	-
One-year variable remuneration for 2017	-	-	-	-	-	50
Multi-year variable remuneration for 2017						
Disbursement portion subject to holding period 2017 (second quarter 2019)	-	-	-	-	36	-
Deferral 2017 (second quarter 2019)	-	-	-	-	15	-
Multi-year variable remuneration for 2016						
Disbursement portion subject to holding period 2016 (second quarter 2018)	-	-	-	-	-	72
Deferral 2016 (second quarter 2018)	-	-	-	-	15	15
Deferral 2016 (second quarter 2019)	-	-	-	-	15	-
Total	**751**	**510**	**810**	**759**	**641**	**646**
Services[3]	510	510	510	526	510	526
Total remuneration	1,261	1,020	1,320	1,285	1,151	1,172

[1] Including taxable non-cash benefits within the customary scope.
[2] The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.
[3] Service expenses according to the German Commercial Code (HGB) amounted to € 435,000 in 2019 (2018: € 317,000).

Marcus Schulte[1]

Treasurer

in € thousand	Benefits granted				Allocation	
	2019	Minimum	Maximum	**2018**	**2019**	**2018**
Fixed remuneration	500	500	500	-	500	-
Fringe benefits[2]	22	22	22	-	22	-
Total	**522**	**522**	**522**	**-**	**522**	**-**
One-year variable remuneration for 2019	48	-	60	-	-	-
Multi-year variable remuneration for 2019						
Disbursement portion subject to holding period 2019 (second quarter 2021)[3]	48	-	60	-	-	-
Deferral 2019 (second quarter 2021)[3]	29	-	36	-	-	-
Deferral 2019 (second quarter 2022)[3]	29	-	36	-	-	-
Deferral 2019 (second quarter 2023)[3]	29	-	36	-	-	-
Deferral 2019 (second quarter 2024)[3]	29	-	36	-	-	-
Deferral 2019 (second quarter 2025)[3]	29	-	36	-	-	-
Total	**763**	**522**	**822**	**-**	**522**	**-**
Services[4]	250	250	250	-	250	-
Total remuneration	1,013	772	1,072	-	772	-

[1] Mr. Schulte joined pbb on January 1, 2017 and was appointed to the Management Board of pbb with effect of January 1, 2019. Only granted benefits and allocations effective his appointment as a member of the Management Board are reported.
[2] Including taxable non-cash benefits within the customary scope.
[3] The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.
[4] Service expenses according to the German Commercial Code (HGB) amounted to € 250,000 in 2019.

Pension Commitments

No commitment to pension benefits for old age, for occupational and general disability, were made to members of the Management Board who were in office in 2019.

As a member of pbb's Management Board, Andreas Arndt receives a pension in the amount of 5.2% of his basic annual remuneration for each completed year of service, subject to a cap of 60%. The pension entitlements are considered to be immediately vested. They may be drawn upon once the age of 62 has been reached. However, they shall be suspended as long as (and to the extent that) the service contract continues beyond the age of 62.

As member of pbb's Management Board, Thomas Köntgen receives a pension in the amount of 5.2% of his basic annual remuneration for each completed year of service, subject to a cap of 55%. The pension entitlements are considered to be immediately vested. They may be drawn upon once the age of 62 has been reached.

As member of pbb's Management Board, Andreas Schenk receives a pension in the amount of 5.2% of his basic annual remuneration for each completed year of service, subject to a cap of 50%. The pension entitlements are considered to be immediately vested. They may be drawn upon once the age of 63 has been reached.

Section 16 of the German Company Pensions Act (Betriebsrentengesetz) applies to the examination of whether pension benefits need to be adjusted after retirement.

Effective 1 January 2019, pbb makes defined-contribution pension commitments to Marcus Schulte in the amount of €250,000 p.a. The pension entitlements may be drawn upon once the age of 63 has been reached. Starting from the date of the first pension payment, the guaranteed amount is adjusted by 1% p.a.

In case of the death of a Management Board member, his or her spouse receives 60% of the pension entitlement. In addition, pensions to half-orphans or orphans are paid until the respective children reach the age of 18. Where a child is still in education beyond the age of 18, orphans' benefits will continue to be paid until conclusion of vocational training – however, not after the child has reached the age of 25. The total amounts received by half-orphans must not exceed 30% of the pension entitlement of the deceased parent as long as the surviving spouse receives survivor benefits. Full orphans will jointly receive up to 60% of the pension of the deceased parent. Surviving spouses and children from a marriage that the member of the Management Board enters into after retirement are not entitled.

The fair value of the defined contribution pension commitments for Mr Schulte amounted to €580,000 as of 31 December 2019, taking the contributions from the two previous years into account.

Pension commitments to Management Board members of pbb[1] in office during the financial year 2019 according to IFRS [2]

	2019				2018			
in € thousand	Present value of pension claims vested during the business year	Interest expenses	Past services costs	Pension obligation as at 31.12.2019	Present value of pension claims vested during the business year	Interest expenses	Past services costs	Pension obligation as at 31.12.2018
Andreas Arndt	640	53	-	3,850	631	36	-	2,575
Thomas Köntgen	572	50	-	3,820	583	36	-	2,445
Andreas Schenk	510	42	-	3,370	526	30	-	2,054
Marcus Schulte	-	-	-	-	-	-	-	-
Total	**1,722**	**145**	**-**	**11,040**	**1,740**	**102**	**-**	**7,074**

[1] For details concerning pension commitments to former members of the Management Board and their surviving dependants, please refer to the Notes.
[2] Statements without salary conversion.

Pension commitments to Management Board members of pbb[1] in office during the financial year 2019 according to HGB [2]

in € thousand	2019 Provisions for pensions as at 31.12.2019	2019 Additions to provisions for pensions	2018 Provisions for pensions as at 31.12.2018	2018 Additions to provisions for pensions
Andreas Arndt	3,059	938	2,121	704
Thomas Köntgen	2,713	877	1,836	621
Andreas Schenk	2,224	774	1,450	530
Marcus Schulte	-	-	-	-
Total	**7,996**	**2,589**	**5,407**	**1,855**

[1] For details concerning pension commitments to former members of the Management Board and their surviving dependants, please refer to the Notes.
[2] Statements without salary conversion.

Other Provisions

The service contracts entered into with the members of the Management Board do not include any clauses giving rise to severance payments. Where the appointment as a member of the Management Board is terminated prematurely without good cause, any severance payment then agreed upon is capped at two years' remuneration, calculated as follows: two years' remuneration is calculated as twice the amount of (i) basic annual remuneration for the preceding calendar year and (ii) the share of variable remuneration exclusively attributable to the Bank's performance. In this context, pbb is entitled to determine a higher or lower amount for the share of the calculatory variable remuneration attributable to a given calendar year, if there is sufficient evidence that the Company's performance during the current calendar year will be higher or lower than its performance in the preceding calender year. Furthermore, the severance pay is limited to the extent that it must not exceed the remuneration due for the remaining term of the employment relationship.

To the best of our knowledge, no member of the Management Board received payments from or benefits committed upon by third parties, by reference to the office held as member of the Management Board of pbb during the year under review.

The service contracts entered into with the members of the Management Board do not contain any clauses for severance pay upon a change of control. No compensation agreements, as defined in section 315a (1) no. 9 of the HGB, which provide for compensation in the event of a takeover bid, have been entered into with Management Board members or employees.

SUPERVISORY BOARD

Supervisory Board remuneration is laid out in section 11 of the Memorandum and Articles of Association, and was moderately adjusted as at 1 January 2019.

The last amendment of Supervisory Board remuneration was made in 2015 in conjunction with pbb's initial public offering (IPO). At that time, pbb took over the Supervisory Board remuneration of the sole shareholder, Hypo Real Estate Holding AG (HRE). Until the IPO, the remuneration of the Supervisory Board at pbb was relatively modest. However, given that HRE's steering function no longer applied after the IPO, the former Supervisory Board remuneration was no longer appropriate. The remuneration structure taken over by pbb from HRE in 2015 had already been considerably cut at HRE, in 2012. The remuneration adjustment made in 2019 reflects the considerable increase in terms of content and time requirements for Supervisory Board activities in recent years, and follows the overall development customary in the market.

The basic annual remuneration for membership in the Supervisory Board was increased by €5,000, i.e. from €30,000 to €35,000 for ordinary Supervisory Board members, from €75,000 to €80,000 for the Chairman of the Supervisory Board, and from €45,000 to €50,000 for the Deputy Chairman of the Supervisory Board. Furthermore, the annual remuneration for membership in a Supervisory Board committee with highly time-consuming tasks, i.e. the Audit Committee and the Risk Management and Liquidity Strategy Committee, was improved from €10,000 to €15,000 for ordinary members, and from €20,000 to €30,000 for each of the committee chairs. Regarding all other Supervisory Board committees, the basic annual remuneration remained unchanged at €10,000 for ordinary Supervisory Board committee members, and at twice this amount for chairmanship of a Supervisory Board committee. Remuneration entitlements accrue on a pro rata basis for the period of the appointment in each case.

In addition, members of the Supervisory Board receive a €500 attendance fee for each meeting of the Supervisory Board (or Supervisory Board committee) they attend, except where meetings are held in the form of a conference call or video conference. The members of the Supervisory Board receive their remuneration and attendance fees plus statutory value-added tax, if any. Furthermore, members of the Supervisory Board are reimbursed for their reasonable expenses.

pbb may take out a Directors & Officers (D&O) liability insurance policy in favour of members of the Supervisory Board, with a maximum annual aggregate cover of €200 million, which covers statutory third-party liability claims that may arise from Supervisory Board work (including work on Supervisory Board committees), as well as any statutory third-party liability claims arising from Supervisory Board members' work on corporate bodies and committees of the Company's subordinated associates.

pbb has entered into a liability insurance policy with an aggregate cover of €175 million, which covers all Supervisory Board members, all Management Board members, as well as certain specific other employees of pbb Group. The Company is convinced that, given its risk profile, the aggregate cover is adequate. pbb shall bear the costs of this insurance.

Remuneration for members of pbb's Supervisory Board in 2019[1]

					2019	2018
in €	Basic remuneration and remuneration for committee work	Attendance fees	Subtotal	Value-added tax (19%)	**Total**	**Total**
Dr. Günther Bräunig	135,000.00	11,500.00	146,500.00	27,835.00	174,335.00	167,447.67
Dr. Jutta Dönges (from 21.6.2018)	65,000.00	8,500.00	73,500.00	13,965.00	87,465.00	35,789.66
Dr. Thomas Duhnkrack	50,000.00	4,000.00	54,000.00	10,260.00	64,260.00	54,145.00
Dr. Christian Gebauer-Rochholz [2]	35,000.00	3,000.00	38,000.00	7,220.00	45,220.00	39,270.00
Dagmar Kollmann [3]	115,000.00	13,500.00	128,500.00	-	128,500.00	119,969.93
Georg Kordick [2]	35,000.00	3,000.00	38,000.00	7,220.00	45,220.00	38,675.00
Joachim Plesser	85,000.00	10,000.00	95,000.00	18,050.00	113,050.00	94,605.00
Oliver Puhl	50,000.00	5,000.00	55,000.00	10,450.00	65,450.00	52,955.00
Heike Theißing [2]	45,000.00	5,000.00	50,000.00	9,500.00	59,500.00	53,550.00
Dr. Hedda von Wedel (until 21.06.2018)	-	-	-	-	-	33,393.36
Total	**615,000.00**	**63,500.00**	**678,500.00**	**104,500.00**	**783,000.00**	**689,800.62**

[1] The table does not specify the cost of the D&O liability insurance policy taken out in favour of Supervisory Board members. pbb has entered into a group insurance policy which, in addition to the Supervisory Board members, also covers the members of the Management Board as well as staff members of pbb and its associates. The total cost of this D&O liability insurance policy amounts to approximately €1.34 million p. a., plus insurance tax. The table does not specify the remuneration of the employee representatives provided under their individual employment contracts.

[2] Employee representative.

[3] No value-added tax applies, due to the member's domicile abroad, therefore the value added tax for the financial year 2019 is not shown anymore. pbb pays tax on behalf of the Supervisory Board member.

EMPLOYEE REMUNERATION

Against the background of the InstVergV revision, effective 4 August 2017, pbb Group carried out a review in 2018 regarding the necessity and extent of potential adjustments of its employee remuneration system due to regulatory requirements; as part of the review, it was also evaluated whether any adjustments would be useful and appropriate considering pbb Group's business model and risk situation, taking the overall market environment into account. Implementation of the identified adjustment requirements was generally completed in 2019.

Remuneration Components

In the financial year 2019, total remuneration of senior staff and employees comprised the following elements:
Non-performance-related (monetary) remuneration, including social insurance and fringe benefits
Performance-related variable remuneration

Non-performance-related Remuneration

All employees receive an annual fixed salary, which is reviewed – and adjusted if necessary – as part of an annual standard process. pbb Group uses functional and country-specific market comparisons for the determination of fixed salaries. The appropriateness and competitiveness of fixed salaries, and compliance with regulatory requirements, is subject to review by independent external remuneration and legal advisors.

Taking various tax and social security aspects into account, pbb Group offers its employees social insurance and fringe benefits. pbb Group established a series of company pension schemes in order to provide retirement benefits to employees.

Performance-related Variable Remuneration

The key elements of the variable remuneration system are harmonised for Management Board members and employees. This applies to the following elements:
- examination of requirements for determining the total amount of variable remuneration;
- risk-adjusted performance measurement parameters at the level of the institution;
- maximum level of target achievement (150%);
- disbursement structure for risk takers; and
- determination of the variable remuneration component on the basis of an individual calculatory reference value.

Performance Measurement

Employee performance is also measured on three levels: institutional, organisational unit (division) and personal performance. Allocation of variable remuneration is based on the achievement of qualitative and quantitative targets at both divisional and individual level – to the extent possible, reference shall be made to pbb Group's business and risk strategy; target achievement shall be determined for every division and every employee.

The qualitative and quantitative divisional targets are established on an annual basis and derived from the corporate targets and the business plans made for the respective financial year. The establishment of targets commences with the setting of overall corporate strategic priorities by the Management Board, in order to facilitate the management of divisional targets. In particular, qualitative divisional targets are established on this basis. In a second step, quantifiable targets are defined which have to be related to key performance indicators, such as new business volume, new business margins, cost budgets, Furthermore, the targets have to be closely connected with corporate planning for the current – or future – financial year(s). If possible, qualitative targets are to be based on

quantifiable indicators as well, and the target level of 100% has to be defined. The link to the corporate business and risk strategy shall be reviewed and documented for every divisional target. This will ensure that the divisional targets were derived from – and synchronised with – the strategic targets according to pbb Group's business and risk planning. The Management Board of pbb adopts the divisional targets, which have to be provided to all employees of the respective division at the beginning of the year.

At the individual level, every employee is provided with an annual target agreement comprising quantitative and qualitative targets for the current financial year. Targets at the individual level shall also be derived from the indicators established at institutional and divisional level. In particular the quantitative and qualitative work targets of employees have to be in line with the business and risk strategy, and shall be designed to support the targets derived from this strategy. The measurement of every target is based on indicators, allowing transparent performance assessments at the end of every financial year. This forms the basis for the allocation of variable remuneration components to individual employees.

Employee performance measurement is based on a pool system which links the three levels of performance measurement. For this purpose, pbb compiles the calculatory reference values of all employees into a bonus pool, the total amount of which is based on the institutional performance. The bonus pool is subsequently allocated to the different divisions: 50% is allocated based on divisional performance, and 50% based on institutional performance. Divisional bonus pools are allocated to the employees of the respective division on the basis of their individual performance. The share in the relevant divisional pool is allocated to each respective employee in the form of a calculatory Envisaged Personal Reward ("EPR") value. In principle, the calculatory EPR value allocated may range between a minimum of 0% and a maximum of 150% of the relevant personal calculatory reference value.

Disbursement Structure

Regarding the disbursement structure, pbb distinguishes between employees who have a material influence on pbb Group's overall risk profile (so-called risk takers), and other employees (so-called non-risk takers). If an employee becomes a risk taker in the course of a year for a period of at least three months, the risk-taker regulations apply to his/her variable remuneration earned during the entire financial year.

For non-risk takers, the EPR value corresponds to the variable remuneration, which is usually granted in cash at the end of the first half of the year subsequent to the financial year for which the variable remuneration is granted.

The requirements to the disbursement of variable remuneration, pursuant to section 20 of the InstVergV, were implemented on a uniform basis for Management Board members and employees. This applies in particular to:
> the deferral portion (60% for Management Board members and second-level managers; 40% for all other risk takers);
> the deferral period (five years for Management Board members and second-level managers; three years for all other risk takers) and the rule governing the (pro rata) vesting of deferrals;
> the requirements for back-testing and malus tests as well as clawbacks; and
> the sustainability component.

Regarding risk takers who are employees, the Company implemented a threshold specific to the institution for annual variable remuneration, applicable as from 2019, from which the deferral for risk takers is increased from 40% to 60% (employees with a particularly high level of variable remuneration, in accordance with section 20 (3) of the InstVergV). For employees in sales functions, the threshold was set at €150,000. The threshold for non-sales employees was set at €100,000, given their usually low variable remuneration. The threshold for pbb's employees in New York is higher than the threshold at other locations due to the overall higher local remuneration level in New York.

However, the separation of variable remuneration into a disbursement and a deferral portion does not apply if the EPR value established for an employee and a specific financial year is below the threshold value established for regulatory purposes. At present, this threshold value amounts to €50,000 per person and year.

pbb identifies risk takers according to section 18 of the InstVergV, in line with the criteria laid out in Delegated Regulation (EU) 604/2014. These criteria refer in particular to:

- function of senior manager or other form of executive position;
- lending authorities;
- voting rights in important committees; and
- remuneration of the employee.

In total, besides the four members of the Management Board, a further 103 employees (2018: three Management Board members and 100 employees) were identified as risk takers in 2019. The Management Board informed the Supervisory Board concerning the identified risk takers, while the details of the internal risk analysis were documented.

Additional Provisions of the Adjusted Remuneration System

Remuneration of Employees in Monitoring Units (section 9 of the InstVergV)

Regarding the remuneration of employees working in monitoring units within the meaning of section 1 (11) of the InstVergV, emphasis is placed upon fixed remuneration. The variable remuneration component of such employees is limited to less than one third of their total remuneration. In order to avoid conflicts of interest, the amount of variable remuneration components for employees working in monitoring units is never based on the same remuneration parameters applicable in the organisational unit to be monitored.

Hedging ban (section 8 of the InstVergV)

The risk adjustment of variable remuneration must not be restricted or neutralised by way of hedging or other countermeasures, such as third-party contracts obliging the third party to make direct or indirect compensation payments to the employee in the event of a reduction of variable remuneration (insurance); this applies mutatis mutandis to derivatives designed to hedge price losses of pbb financial instruments.

pbb Group has taken appropriate measures to prevent hedging or other countermeasures in this context. Moreover, the banning of hedging and other countermeasures is contractually regulated in collective wage agreements (applies to employees in Germany) and in individual employment agreements (applies to employees as well as to second-level senior staff, and to employees abroad). Compliance with these agreements is subject to reviews (spot checks).

Review of, and Adjustments to, the Remuneration Systems (section 12 of the InstVergV)

In the case of any change to the business and risk strategy, the remuneration strategy and the structure of the remuneration systems will be reviewed and adjusted if necessary. In addition, pbb carries out reviews (and adjustments, if necessary) of its remuneration system and the respective parameters to ensure appropriateness at least once a year, with a particular view to their compatibility with Group strategies.

GOVERNANCE OF REMUNERATION SYSTEMS

pbb established a two-tier organisational and management structure in line with the AktG: it comprises the Supervisory Board as an independent supervisory body, and the Management Board, responsible for the management of the Bank. The Supervisory Board monitors, determines, and is responsible for the remuneration of the Management Board members, while the Management Board monitors, determines, and is responsible for the remuneration systems pertaining to senior staff and other employees of the pbb Group; in addition, the Management Board ratifies the amount and allocation of the remuneration granted. In accordance with section 111 (4) of the AktG, the Supervisory Board has introduced a requirement that the remuneration system for employees requires Supervisory Board approval.

In line with the regulatory requirements as set by the KWG and the IVV, pbb's remuneration governance comprises the Remuneration Committee established by the Supervisory Board, and the Remuneration Officer appointed by the Management Board.

The Remuneration Committee supports the Supervisory Board in ensuring that the remuneration systems for the members of the Management Board have an appropriate structure, and prepares Supervisory Board resolutions on the remuneration of Management Board members. This includes in particular the preparation of Supervisory Board resolutions regarding the determination of the total amount available for variable remuneration as well as the determination of appropriate remuneration parameters, performance contributions, performance and retention periods, the conditions for partial or full reduction, or clawback, of variable remuneration. In addition, the Remuneration Committee supports the Supervisory Board with the regular – at least annual – review considering the appropriateness of the regulations of the remuneration system established by the Supervisory Board.

Furthermore, the Remuneration Committee monitors the appropriate structure of the remuneration systems for employees, and in particular for the heads of Risk Controlling and Compliance, and for risk takers. In this context, the Remuneration Committee assesses the effects of the remuneration systems on the Group's risk, capital, and liquidity management.

In addition, the Remuneration Committee supports the Supervisory Board in monitoring the proper inclusion of internal control instances and any other relevant areas in the structuring of remuneration systems. As part of its duties, the Remuneration Committee assesses the impact of remuneration systems on the Bank's risk, capital and liquidity situation; it also ensures that remuneration systems are in line with (i) the Bank's business strategy (which is geared towards the Bank's sustainable development) and the risk strategies derived from such strategy, as well as (ii) the remuneration strategies at institutional and Group level.

The Remuneration Committee consists of the Supervisory Board's Chairman and Deputy Chairperson, as well as one shareholder and one employee representative. The Remuneration Committee convened four times during 2019.

pbb appointed a Remuneration Officer and a deputy in order to ensure appropriate, sustained and effective monitoring of employee remuneration. The Remuneration Officer is responsible for the constant monitoring of the appropriateness of pbb's remuneration systems for employees. Therefore, the Remuneration Officer is involved with the ongoing processes regarding remuneration systems, both in terms of the conceptual and further redevelopment of such systems, as well as with regard to their current implementation. An institutional reporting channel was established for the remuneration officer to report directly – i.e. excluding involvement of the Management Board – to the chair of the Remuneration Committee. At least once per year, the Remuneration Officer produces a remuneration report containing an assessment of the appropriateness of the remuneration systems for employees (section 24 of the InstVergV).

Report on Expected Developments

MACROECONOMIC FORECAST

Although the global macroeconomic environment is expected to improve slightly in 2020 compared to the previous year, it will nonetheless remain muted. In its World Economic Outlook, the International Monetary Fund (IMF) is forecasting global growth of 3.3% (source: IMF). While this outlook exceeds the rate of growth achieved in 2019, it is however lower than projected the year before (source: IMF). This subdued economic growth is attributable to ongoing risks in relation to global trade and geopolitical uncertainties.

The reasons for the slightly brighter outlook are the cautious signs of bottoming out that are emerging in the manufacturing industry and in global trade, supported by a loose monetary policy. Initial progress is being made in the trade talks between China and the US, which have culminated in the signing of a partial trade deal. At the same time, concerns about an unregulated withdrawal (no-deal Brexit) by the UK from the EU have eased for now. In spite of this, the downside risks remain high (source: IMF).

Against the backdrop of easing trade conflicts, there should be an improvement in global trade in the course of the year. The IMF expects an increase from 1.0% in 2019 to 2.9% in 2020 (source: IMF), which should translate into a marginal improvement to 1.3% in euro area growth for 2020. Besides somewhat stronger exports, domestic demand in particular is expected to drive growth.

The European Central Bank (ECB) expects consumer prices to rise by only 1.1% in 2020, which is down slightly on the figure of 1.2% for 2019 (source: ECB). With this in mind, most market participants believe the ECB will continue to pursue its loose monetary policy in 2020 (source: Reuters).

Growth prospects within the eurozone are mixed. The IMF predicts growth rates in France in 2020 to match the previous year's level of 1.3%. In Germany, growth is expected to accelerate from 0.5% in the previous year to 1.1%. A slight rise in economic momentum is projected for Italy, with growth rates there set to improve from 0.2% to 0.7%, while Spain is expected to see its growth fall from 2.0% in 2019 to 1.6% this year (source: IMF).

The economic situation in the UK is closely linked to the country's withdrawal from the EU and the subsequent negotiations on future relations with the EU. The UK economy is expected to stabilise and grow at a rate of 1.4% in 2020 (source: IMF).

Growth momentum in Sweden is likely to remain weak in 2020, rising by 1.0% compared with 1.1% in the previous year. In contrast, growth rates in Eastern Europe are expected to remain relatively strong: at 2.2% in the Czech Republic, 2.7% in Slovenia, 2.8% in Hungary, and 3.3% in Poland. (source: European Commission).

For the US, growth of 2.0% is anticipated for 2020, which is down slightly on the previous year's rate of 2.3%. These somewhat easing dynamics are due to the phasing out of the positive effects of the country's fiscal and monetary policy (source: IMF). The US Federal Reserve (Fed) does not anticipate any further move on interest rates in 2020, so that the Fed Funds rate should remain unchanged at 1.75% (source: Federal Open Market Committee).

The scenario outlined here assumes no further escalation in the trade conflict between the US and China, the US and Europe will manage to avoid new trade conflicts between each other, and that the UK and the EU will reach a trade agreement by the end of 2020.

Even though downside risks have eased somewhat in recent months, they remain high and are more defined than anticipated a year ago. These risks for future prospects include another flare-up in the trade tensions between the US and its trading partners, among other things. Conflicts could be ignited if the commitments given by China in the partial trade agreement, which in certain sections are very optimistic, are not upheld. Europe could also attract attention, for example due to its refusal to include agricultural products in the trade talks that are still pending with the US, or because of the plans of some EU member states to tax revenues generated by US tech companies.

There is also a high risk that the talks about future relations between the UK and the EU will not lead to a conclusion of a trade agreement within the scheduled timeframe of 11 months. If the talks were to fail, trade between the EU and the UK would be conducted from 2021 onwards on World Trade Organisation (WTO) terms, which would no doubt have negative economic consequences for both sides.

Geopolitical risks, for example in the Middle East, could lead to further downside risks. This could have a negative impact on global oil supplies and therefore adversely affect the business climate and consumption.

Climate change also leads to greater risks for the economy (source: German Federal Environmental Agency). In the World Economic Forum's Global Risks Report, the top five most significant long-term risks are dominated exclusively by climate change and environmental issues (source: World Economic Forum).

SECTOR-SPECIFIC FORECASTS

Overall Situation in the Banking Sector

Despite the successes in raising capital and reducing non-performing loans, the European banking sector will continue to operate in a difficult environment during 2020.

Fierce competition, weak economic growth, the low interest environment and regulatory costs continue to exercise significant pressure on profitability. Turbulence on the financial markets could prove to be an additional burden (sources: Bloomberg, EBA, ECB).

Real Estate Finance

The fundamentally positive momentum on the European and US property markets is likely to remain intact in the near future. With no significant change expected in the central banks' interest rate policy, the property markets are expected to continue to perform well. This is particularly the case for stable economies such as Germany, with large, liquid real estate markets and whose security is valued by conservative investors in particular. Investment demand is supported here by the continued positive performance of fundamental data. Demand for space is expected to continue keep the vacancy rates low in 2020, in nearly all core markets, with a resultant stabilisation and further upside pressure on rents (sources: Jones Lang LaSalle, Property Market Analysis).

Despite expectations of a long-term positive trend, pbb predicts the risk of weaker real estate markets in the medium terms against the background of the sharp increase in real estate prices in recent years. This scenario could materialise, for example, in the event of economic risks or higher interest rates, leading to a significant increase in the cost of refinancing real estate. As pbb Group sees high real estate prices in response to the low yields offered in all other markets, adjustments are expected in all markets should there be a change in the interest rate environment.

While the implementation of regulatory requirements regarding capital and credit risks will impact on the availability of finance through the banks and alternative providers of credit, sufficient financing should nonetheless be available overall. (source: Immobilienzeitung)

Public Investment Finance

With the announcement of the TLTRO III purchase programme in March 2019 and the resumption of purchases in October 2019, the ECB at the same time confirmed its loose monetary policy for the next two to three years. Based on pbb's market observations, competition in the market for public-sector finance remains very high. The key interest rate adjustment in autumn 2018 also made the hunt for yield more difficult for investors, so that institutional investors who are entering the market as direct lenders to the public sector and public-sector investments – whether through addressing the market directly, through credit funds or via credit platforms – are heating up competition.

At the same time, public investments are being increasingly postponed due to budget restrictions and other local situations in Europe. Despite this development, margins in the core French market recovered slightly (+20 to 25 basis points on average) according to Finance Active. However, the forthcoming municipal elections will probably defer decisions on public investment in 2020 even further into the future, as it is standard practice for investments to be reviewed following such elections. In this respect, pbb Group views the market environment for new business within the EU and in the core market of France as being muted in the medium and long term. (source: Observatoire Finance Active 2019)

Value Portfolio

pbb Group continues to anticipate a tense market environment in 2019 as a result of the existing global uncertainties. It should also be noted here that the ECB's central bank policy continues to provide good support for credit spreads for government bonds and supranationals in the eurozone. The credit spreads for European countries were very low on 31 December 2019 and offer little scope for further positive development. The current market environment does not hold out much hope for a significant improvement in the credit spreads in 2020 (sources: Bloomberg, ECB).

Italy will play a special role in this context, as it did in 2019. The forthcoming regional elections in 2020 could change the balance of political power and possibly trigger new regional elections. In light of this, new or renewed confrontation with the European Union cannot be ruled out entirely.

Funding Markets

Besides the central banks' loose monetary policy, the focus will remain on the different geopolitical topics. It remains to be seen if a new monetary policy will be agreed under new ECB president Christine Lagarde. Regardless, the ECB will likely continue to pursue an expansive policy in order to reach its inflation target of just under 2% (source: ECB).

A first partial agreement was reached in the trade conflict between the US and China in December 2019, which should slightly reduce tensions between the two countries. Further steps are planned to bring the trade war to an end. As the US will no doubt want to avoid any major upset ahead of the presidential election in November 2020, the election campaign should be supportive for the economy. The US Federal Reserve's future interest rate policy will be shaped significantly by the outcome of the election and further developments in the trade conflict.

COMPANY FORECASTS

The forecasts for pbb Group's future development represent estimates that were made on the basis of the information currently available. If the assumptions on which the forecasts are based on do not materialise or if risks and opportunities do not occur to the extent calculated, the actual results may differ significantly from the results currently expected.

Future Developments in Assets, Financial Position and Earnings

In the financial year 2019, the key performance indicators – as defined in the chapter "Internal Manage-ment System" – are expected to develop as follows:

Key performance indicator	Initial position (financial year 2019)	Forecast (Financial year 2020)
New business volume Real Estate Finance (including prolongations with maturities of more than one year)	€9.0 billion	A volume of between €8.0 billion and €9.0 billion is aimed.
Finanzierungsvolumen Real Estate Finance	€27.1 billion	A slight increase is aimed.
Profit before tax	€216 million	A profit in a range between €180 million and €200 million is aimed.
Cost-income ratio	43.5%	A slight increase is aimed.
Return on equity after tax	5.7%	A range between 4.0% and 5.0% is aimed.
CET1 ratio	15.2%	pbb Group aims to achieve a CET1 ratio significantly above the SREP ratio of 9.5% that banks have to comply with in addition to the country-specific (and thus portfolio-specific) varying counter-cyclical capital buffer.

A crucial secondary condition when aiming to achieve pbb Group's earnings and profitability goals is ensuring the risk-bearing capacity: regarding the normative perspective, the Bank strives to adhere to the minimum capital ratios as required by regulators – even when taking an adverse economic scenario as a basis. Regarding the economic perspective, pbb Group is aiming to achieve levels of capitalisation available to cover risks that adequately exceed economic capital requirements. This goal should be achieved, provided no further significant widening of spreads occurs – for example, due to Brexit or other macroeconomic developments – which would then further increase hidden encumbrances.

In 2020, the Real Estate Finance (REF) segment is expected to once again contribute the lion's share of profit before taxes. The Public Investment Finance (PIF) and Value Portfolio (VP) segments are anticipated to generate slightly positive profit before taxes.

Opportunities and Risks

Politics

Depending on their outcome, current economic and geopolitical tensions could distort the markets relevant to pbb Group, burdening the development in assets, financial position, and earnings. At the same time, better than expected future developments could positively impact assets, the Bank's financial position, and earnings. Rating changes of economic regions, for example, may impact pbb Group's provisioning requirements.

Economy

Positive economic development of the euro area and especially in Germany is expected to have a favourable impact on the development in earnings, as, for example, pbb Group has to recognise only moderate provisions when taking over credit risks. In addition, fair values of financial assets could increase. A slowing economy, or a recession, could increase the necessary level of provisions, and lead to lower fair values of financial assets as well as lower new business volume, thus also burdening the development in earnings.

Climate Change

Now becoming increasingly noticeable, climate change can impact on an economy in a myriad of ways. For example, it can have a direct impact on real estate in regions threatened by flooding. These changes could impact pbb Group's assets, financial position and earnings (source: Federal Environmental Agency (Umweltbundesamt – UBA)).

Real Estate Markets

Given the tendency of real estate prices to increase sharply in recent years, the risk of a real estate bubble is high. The impact of market interventions cannot be predicted. Rent caps, for example, could lower the investment appetite in residential real estate. The growing trend towards online trading can negatively impact retail property. Overall, these developments can lead to restrictions in new business and to a need for impairment on financings of existing properties (sources: German Institute for Economic Research (DIW), Cologne Institute for Economic Research, Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR).

Interest Rates

Should market interest rates in the euro area rise again, investing the liquidity reserves and own funds could improve the development in earnings; at the same time, funding costs would increase and earnings from floors agreed upon with clients would decrease. An opposite effect could occur if the low interest rate policy was to persist for the longer term. Moreover, in a low interest rate environment, early loan repayments are to be expected. Whilst this could positively impact the short-term development in earnings – for instance due to early termination fees – in the long term it could burden the development as a result of the lower financing volume.

Competition

The intense competition, especially in commercial real estate financing – and the resulting margin pressure – will probably continue or even increase throughout 2018, which in turn may weigh on pbb's development in earnings. Conversely, a slowdown in the intensity of competition – for example due to consolidations in the banking industry – would benefit the Bank's development in earnings.

Digitalisation

In view of increasing cost competition in the banking sector – enhanced by so-called FinTech and PropTech companies – and in order to explore new sources of income, pbb Group is increasingly focusing on digital business processes and models. In future, digitalisation may incur risks as well as opportunities for the development in assets, financial position and earnings, depending especially on the success of digital business models and further IT developments.

Regulatory Environment

pbb Group is required to adhere to a wide variety of legal and regulatory provisions and regulations. The further development of provisions may impact the development in assets, financial position and earnings, as well as capital requirements, funding and pbb Group's business activities – positively and negatively. Furthermore, implementing requirements usually incurs costs.

Within the scope of the SREP, a CET1 minimum ratio and an own funds minimum ratio were set for pbb Group. It cannot be ruled out that the ECB defines even higher capital requirements, or even higher capital ratios in future. This could impact pbb Group's development in assets, financial position and earnings.

IT Security
pbb Group attaches great importance to the security of its information systems. The aim is a constant operation of the IT systems, whilst avoiding unauthorised access to the system and data sets. Despite implemented measures regarding IT security, negative risks on the development in earnings cannot be ruled out.

Human Resources
pbb has further increased its appeal as an employer in recent years. The Bank is in a good position to recruit and retain very well-qualified employees and executives who can play a significant role in achieving the Group's ambitious targets. A range of training and personnel development possibilities, as well as systematic health management, round off the offer. Nevertheless, risks from employee losses and the associated loss of knowledge cannot be fully excluded. In addition, winning new employees will likely become increasingly difficult, especially against the background of high demand for banking sector specialists in the midst of continuing demographic change. To confront this situation, pbb Group is developing innovative instruments for employee recruitment, such as developing and designing an employer brand and making greater use of modern recruitment channels.

Pandemics
Pandemics can impact on macroeconomic performance. It is still difficult to estimate the impact of the new COVID-19 (Coronavirus). The virus can indirectly heighten uncertainty among market participants, so that a slowdown in economic growth can lead to lower transactions volumes, among other things, Large numbers of employees in important roles being incapacitated for a longer period of time can impact directly on operational risks. (sources: Rhine-Westphalia Institute for Economic Research (RWI), International Monetary Fund).

Legal and tax matters
It is possible that legal proceedings yield different results than expected by pbb Group. Thus, an outflow of resources can deviate positively or negatively from the recognised provisions. Risks can also arise from new legal action. Depending on the type of deviation and legal action, this may result in opportunities or risks for the development in earnings. This risk also covers external tax audits by fiscal authorities that may result in additional taxable income, and thus in higher tax expenses for previous periods.

Brexit
Since the United Kingdom's Brexit vote, pbb Group has been focusing intensely on this topic. The Bank is continuously analysing the consequences and risks arising as a result of Brexit for pbb Group and its business model and strategy. This involves evaluating the economic development in the UK and its corresponding impact on the real estate markets. A key component of the analysis is whether, and if so, to what new regulatory requirements pbb's branch office in London will have to adhere with the British supervisory authorities PRA and FCA, in order to be able to continue operating in the United Kingdom after Brexit takes place. While today's calculable facts are looking at an orderly Brexit on 31 January 2020 with a transition period up to the end of 2020, pbb intends to authorise its activities in the UK through the FCA/PRA thereafter. Independent of this, pbb has taken precautionary measures by applying for temporary authorisation under the FCA/PRA Temporary Permissions Regime.

Given its current organisational and operational structure, pbb Group sees no immediate need for action with regard to its business model and adjustment of the business structure.

Brexit has led the UK into a period of economic uncertainty, which is combined with a negative impact on investment activity and overall economic development (source: Bank of England).

Uncertainty also continues to prevail as there will be little time to negotiate a trade agreement between the UK and EU within the scope of the transition period, even after the “orderly” Brexit. These factors could lead to lower (rental) demand for real estate, lower market values and hence to a potential deterioration of the default probabilities in the existing portfolio. pbb Group therefore continues the reinforced monitoring of its portfolio in the UK.

However, to date pbb Group continues to believe that the British real estate market will remain attractive in the medium term, although it will need to practise greater selectivity as regards its lending exposures. pbb believes it is prepared for any future eventualities as regards the inclusion of UK assets in the cover pool after the transition period.

SUMMARY

pbb Group is well-positioned for continued profitability, in an environment that features not only declining margins due to intensified competition, but also growing regulatory requirements. However, this assessment is based on the assumption that additional risks – arising from factors beyond pbb’s control, for example – do not materialise. Giving due consideration to the opportunities and risks, pbb Group expects to generate a pre-tax profit of between €180 million and €200 million in 2020.

Commentary on pbb's Unconsolidated Annual Financial Statements under HGB

COURSE OF BUSINESS

In the 2019 financial year, pbb achieved profit before taxes of €200 million, as reported in its single-entity financial statements in accordance with the German Commercial Code (Handelsgesetzbuch, HGB), thus exceeding the figure achieved in the previous year (2018: €186 million). An increase in general and administrative expenses, due to higher non-personnel expenses, and in risk provisioning, due to higher specific and general loan loss provisions, was more than offset by higher net interest income. In addition, among other things, provisions for restructurings could be reversed in 2019.

New business volume, as well as pbb's financing volumes, are in line with the information provided in pbb Group's Report on the Economic Position.

DEVELOPMENT IN EARNINGS

in € million	2019	2018
Net interest income	473	444
Net fee and commission income	6	6
Net other operating income	-2	-11
Net operating income	**477**	**439**
General and administrative expenses	-227	-215
Personell expenses	-120	-118
Non-personell expenses	-107	-97
Operating results (before loan loss provisions)	**250**	**224**
Risk provisioning	-51	-37
Net income from financial investments	-2	8
Additions to the fund for general banking risks	-	-
Operating results	**197**	**195**
Extraordinary result	3	-9
Profit before tax	**200**	**186**
Taxes	-23	-35
Net income	**177**	**151**

Net Operating Income

Net interest income increased from €444 million in the previous year to €473 million in 2019. Higher early repayment fees as well as reversals of fees not yet received due to the early derecognition of financial instruments were the major reasons for this increase. Moreover, net interest income benefited from an increase of originated interest-bearing financings. In this context, the increase in the average volume of strategic commercial real estate financings (€27.4 billion; 2018: €25.8 billion) more than offset the Value Portfolio decrease, in line with the strategy. The overall bank margin increased slightly as a result of the higher weight of commercial real estate financings and the maturity of higher-yielding liabilities. As in the previous year, net interest income was negatively affected by negative interest rates with respect to the investment of free liquidity and own funds, but benefited from income arising on floors in client business. The termination and novation of derivatives resulted in an expense of €4 million (2018: income in the amount of €5 million). In addition, net interest income includes the expense for the AT1 capital in the amount of €17 million (2018: €12 million).

Net fee and commission income from non-accruable fees amounted to €6 million (2018: €6 million).

Net other operating income/expenses (€-2 million; 2018: -11 Mio. €) was primarily burdened by the bank levy (€-20 million; 2018: €-21 million). This expense is primarily offset by income from the reversal of provisions – for example, due to a positive development as regards legal risks.

General and Administrative Expenses
At €227 million, general and administrative expenses increased slightly year-on-year (2018: €215 million). This was due to non-personnel expenses, which increased, inter alia, due to the costs of implementing new regulatory requirements.

Risk Provisioning
Risk provisioning, being the balance of provisions for possible loan losses and the result from securities and promissory note loans of the liquidity reserve, was increased by net additions of €51 million (2018: net additions of €37 million). The additions to specific loan loss provisions referred to the financing of shopping centres in the United Kingdom, whereas minor reversals were recorded for financings in other regions. The additions to general loan loss provisions were attributable to two factors. On the one hand, for the purposes of determining general loan loss provisions, pbb Group increased the probability of a scenario of an economic slowdown and declining market values for real estate compared to the previous year – as a result of the deteriorated macroeconomic and industry-specific forecast and the rising global risks, which led to an increase in loan loss provisions of €20 million. On the other hand, general loan loss provisions increased by €11 million due to the expansion of the loss database, due to, inter alia, the changed regulatory definition of default and, among other things, also due to the fact that a longer time period is taken into account. As one of the results of the additional data, the models to determine probability of default (PD) and loss given default (LGD) were recalibrated. Regulatory parameters affect loan loss provisions, after adjustment to comply with the requirements stipulated under the German Commercial Code. Apart from these two reasons, reversals of general loan loss provisions mainly resulted from lower probabilities of default and a decreased loss given default, particularly for certain Southern European counterparties, early repayments of loans and lower remaining terms to maturity.

Net Income from Financial Investments
Net income from financial investments amounted to €-2 million (2018: €8 million). Write-ups of investment securities were more than offset by loss absorptions for subsidiaries.

Additions to the Fund for General Banking Risks
As in the previous year, no amounts were transferred to or withdrawn from the fund for general banking risks pursuant to section 340g of the HGB.

Extraordinary Result
The extraordinary result of €3 million (2018: €-9 million) benefited from reversal of provisions related to human resources. These reversals were possible primarily due to the fact that employees from the restructured areas changed to other positions in the Group. In the previous year, there were additions to provisions for restructuring relating to the reorganisation of the business activities in Public Investment Finance and the centralisation of infrastructure tasks.

Profit Before Tax
In 2019, pbb's profit before taxes amounted to €200 million (2018: €186 million).

Taxes
The tax expense amounted to €23 million (2018: €35 million) and almost exclusively resulted from expenses for taxes on income.

Net Income
Net income for 2019 amounted to €177 million (2018: €151 million).

DEVELOPMENT IN ASSETS

in € million	31.12.2019	31.12.2018
Cash reserve	1,141	1,388
Loans and advances to other banks	3,005	2,734
Loans and advances to customers	38,642	39,260
Bonds and other fixed-income securities	8,732	9,558
Equity shares and other variable-yield securities	2	2
Investments in affiliated companies	14	20
Intangible assets	14	10
Tangible assets	5	4
Sundry assets	107	137
Prepaid expenses	329	340
Total assets	**51,991**	**53,453**

General Development in Assets

As at the reporting date, pbb's total assets stood at €52.0 billion, which is a decline of €1.5 billion compared to 31 December 2018. In line with the strategy, loans and advances to customers was characterised by a minor increase in the nominal amount of commercial real estate financings (€27.1 billion; 31 December 2018: €26.8 billion), whereas the volume of non-strategic exposures declined. Moreover, maturities of the non-strategic holdings led to a decrease of bonds and other fixed-income securities.

DEVELOPMENT IN FINANCIAL POSITION

in € million	31.12.2019	31.12.2018
Liabilities to other banks	4,631	4,316
Liabilities to customers	21,121	22,425
Securitised liabilities	21,609	22,092
Sundry liabilities	79	31
Deferred income	511	568
Provisions	287	305
Subordinated liabilities	705	711
Additional Tier 1 capital instruments	312	312
Fund for general banking risks	47	47
Total liabilities	**49,302**	**50,807**
Equity	2,689	2,646
Total liabilities and equity	**51,991**	**53,453**

Liabilities

Liabilities amounted to €49.3 billion (31 December 2018: €50.8 billion). The reasons for the decrease were lower liabilities to customers and maturing securitised liabilities. Provisions fell as a result of utilisations and reversals, following elimination of the corresponding obligation.

Additional regulatory capital instruments include Additional Tier 1 (AT1) capital in the total nominal amount of €300 million and a carrying amount of €312 million, including interest accrued. The bond issued by pbb on 12 April 2018 carries an initial coupon of 5.75% p.a. and has no final maturity. There are certain conditions attached to the coupon payments.

Equity

in € million	31.12.2019	31.12.2018
Share capital	380	380
Additional paid-in capital	1,639	1,639
Retained earnings	549	493
Unappropriated retained earnings	121	134
Equity	**2,689**	**2,646**

For both of the financial years 2019 and 2018, pbb's share capital amounted to € 380,376,059.67, consisting of 134,475,308 registered ordinary bearer shares in the form of no-par value shares with a notional interest in the share capital of € 2.83 per share. The additional paid-in capital remained unchanged. Net additions of €56 million (2018: €20 million) were made to retained earnings during the year under review. Unappropriated retained earnings in the amount of €121 million (31 December 2018: €134 million) comprised net income of €177 million (2018: €151 million), net additions to retained earnings in the amount of €56 million (2018: €20 million. In the previous year, additional €3 million were withdrawn profit-participation certificates.

Key Regulatory Capital Ratios

According to Art. 7 (3) of the Capital Requirements Regulation ("CRR"), pbb was exempted from the requirements laid out in parts 2 to 5 and 8 of the CRR; for instance, this includes own funds and capital requirements, stipulations on large exposures and exposures to transferred credit risk, as well as disclosure requirements.

Disclosures Pursuant to Section 315a (1) HGB

pbb Group's Supplemental Information according to section 315a (1) of the German Commercial Code (HGB) is equal to pbb's Supplemental Information according to section 289a (1) HGB.

Composition of Subscibed Capital (Section 315a (1) No. 1 HGB)
The composition of pbb's subscribed capital is disclosed in the Note "Equity". Each bearer share with no par value entitles the shareholder to one vote at the Annual General Meeting. pbb currently does not hold any nonvoting treasury shares. No shareholder and no shareholder group is entitled to special rights, that confer power to control vis-á-vis pbb.

RESTRICTIONS AFFECTING THE VOTING RIGHTS OR THE TRANSFER OF SHARES (SECTION 315A (1) NO. 2 HGB)

With respect to the exercise and transfer of voting rights of shares only the statutory provisions apply. The voting rights are not limited by size. All shareholders who register for participation in the Annual General Meeting in time and who have demonstrated their right to participate in the Annual General Meeting and to exercise their voting rights may exercise the voting rights subject to a possible loss of rights in accordance with section 44 of the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) or section 59 of the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz; WpÜG) attached to all the shares held and registered by them. Where pbb holds treasury shares, section 71b of the German Stock Corporation Act (Aktiengesetz, AktG) prohibits the exercise of rights vested in such shares.

HRE Holding has committed itself to avoid exercise of control over pbb by entering into a control avoidance agreement with pbb. HRE Holding undertakes to exercise voting rights vested to it at the point in time at which the control avoidance agreement enters into effect, and/or at any subsequent point in time at which HRE Holding holds pbb shares, to a maximum of 49% of the present voting capital at the adoption of resolutions regarding the appointment or removal of Supervisory Board members as well as resolutions taken as part of management decisions according to sections 83, 111 (4) sentences 3 to 5, 119 (2) or 179a of the AktG, not to make any proposals for resolution to pbb's Annual General Meeting, in particular for the appointment of Supervisory Board members, and not to vote for candidates for pbb's Supervisory Board which are not independent from HRE Holding, Finanzmarktstabilisierungsfonds-FMS (FMS), FMSA and the Federal Republic of Germany, with the exception of two Supervisory Board members proposed by FMSA to pbb in line with the new framework agreement.

pbb is not aware of any other restrictions affecting voting rights or the transfer of shares.

Shareholdings Exceeding 10% of Voting Rights (Section 315a (1) No. 3 HGB)
According to the knowledge of pbb no shareholder held at least 10% interest in the pbb as of 31 December 2019.

The notifications of voting rights pursuant to sections 33 et seq. of the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG), published by pbb, are available online, inter alia, under "https://www.pfandbriefbank.com/en/investors/mandatory-publications/notifications-according-to-33-et-seq-wphg.html".

Shares with Special Rights Conferring Powers of Control (Section 315a (1) No. 4 HGB)
Shares carrying special rights, which would permit the holder to exercise control, do not exist.

Type of Control of Voting Rights Regarding Shares Held by Employees with their Rights of Control not Being Directly Exercised (Section 315a (1) No. 5 HGB)
Employees holding pbb shares exercise their rights, like all other shareholders, according to statutory provisions and the Articles of Association.

Statutory Provisions, and Provisions in the Articles of Association Regarding the Appointment and Removal of Members of the Management Board, and Regarding Amendments to the Articles of Association (Section 315a (1) No. 6 HGB)
In accordance with section 84 of the AktG and section 6 of the Articles of Association, the members of the Management Board are appointed by the Supervisory Board. The number of members of the Management Board is determined by the Supervisory Board. Pursuant to the Articles of Association, the Management Board consists of at least two members. Members of the Management Board are appointed for no more than five years per term. The term of office may be renewed or extended for a maximum of five years in each case. In case of urgency, the Local Court of Munich (Amtsgericht) shall appoint a missing member of the Management Board upon application of a party involved (section 85 of the AktG). The Supervisory Board may revoke an appointment to the Management Board, and also an appointment to the position of Chairman of the Management Board, should there be good cause for doing so.

Evidence that the Management Board members are trustworthy, have the required professional qualifications, and are sufficiently available, must be provided to BaFin, ECB and the German Bundesbank. According to section 45c of the German Banking Act (Kreditwesengesetz, KWG), BaFin may appoint a special representative, and entrust him or her with the performance of activities of individual Management Board members. BaFin may prohibit members of the Management Board from carrying out their activities, or limit the performance of these activities.

Any amendment of the Articles of Association requires a resolution of the Annual General Meeting (section 179 (1) sentence 1 of the AktG), for which generally a simple majority of the votes cast is required according to section 17 of the Articles of Association, provided, however, that no higher majority is required by law or other sections of the Articles of Association. In cases where a majority of the share capital represented during the passing of the relevant resolution is required – under no formal restrictions – due to regulatory requirements, the simple majority of the share capital represented during the passing of the relevant resolution shall be sufficient. According to section 9 (3) of the Articles of Association, the Supervisory Board shall be authorised to amend the Articles of Association, provided that such amendments are restricted to the wording.

Authorisation of the Management Board to Issue or Repurchase Shares (Section 315a (1) No. 7 HGB)

Authorised Capital
The Management Board is authorised to increase, on one or more occasions, pbb's share capital by up to a maximum total amount of €190,188,029.83 by issuance of new ordinary bearer shares with no par value for contribution in cash or in kind, subject to the approval of the Supervisory Board (Authorised Capital 2015). The shareholders' subscription rights may be excluded under certain conditions. The authorised capital has not been used yet.

Conditional Capital
Pursuant to the resolution of the Annual General Meeting dated 10 June 2015, the share capital of pbb shall be conditionally increased by up to €190,188,029.83 through the issuance of up to 67,237,653 new ordinary bearer shares with no par value (Conditional Capital 2015). The conditional capital increase can only be carried out to the extent to which the conversion or option rights of the holders or creditors of convertible bonds, convertible profit participation rights, convertible hybrid

bonds or warrants attached to warrant bonds or profit-sharing certificates with warrants, which are issued or guaranteed by pbb or group entities (section 18 (1) of the AktG) subordinated to pbb in accordance with the authorisation resolution of the Annual General Meeting dated 10 June 2015 (Authorisation 2015) before 9 June 2020, are exercised, or holders or creditors with an obligation to convert fulfil their obligations to convert, or pbb uses its right to substitute, and other forms of performance in satisfaction thereof are not chosen. The new shares are to be issued at the option and/or conversion prices calculated in each case in accordance with the Authorisation 2015. The new shares shall be entitled to a dividend from the beginning of the financial year in which they are created, by exercise of conversion and/or option rights or by fulfilment of respective obligations to convert or by use of pbb's right to substitute; to the extent legally permissible, the Management Board shall be authorised, with the consent of the Supervisory Board, to assign the profit participation of the new shares in derogation from section 60 (2) of the AktG, also for a financial year which has already expired.

Furthermore, the Management Board shall be authorised, with the consent of the Supervisory Board, to determine further details concerning the rights attached to shares as well as the conditions of share issuances in the context of the capital measures specified in section 4 of the Articles of Association (authorised and conditional capital).

Convertible Bonds, Warrant Bonds, Profit Participation Rights and Hybrid Bonds
The Management Board is authorised to issue convertible bonds, warrant bonds, profit participation rights or hybrid bonds, on one or more occasions, on or before 9 June 2020 with or without limitation of maturities against contributions in cash or in kind. The total nominal amount of all Financial Instruments to be issued under the authorisation shall not exceed a total value of € 3,000,000,000.00. As further set out in the conditions of the relevant Financial Instruments, conversion and/or option rights and/or the respective obligations have to be granted to or imposed on the holders respectively the creditors of the Financial Instruments, which may entitle or oblige to subscribe no-par-value shares up to 67,237,653 shares and with a proportionate amount of share capital of up to a nominal sum of €190,188,029.83 as described in more detail in the resolution of the Annual General Meeting of 10 June 2015. Such conversion and/or option rights and/or the respective obligations may also be granted to or imposed on the holders of profit participation rights and/or hybrid bonds issued.

Treasury Shares
pbb is authorised to buy, for purposes other than securities trading, its own shares in a total volume of up to 10% of the share capital as of 10 June 2015 or – if such amount is lower – of the share capital at the time this authorisation is exercised. Together with other own shares which are in the Company's possession or attributable to the Company pursuant to sections 71d and 71e of the AktG, the own shares purchased on the basis of this authorisation may not at any time exceed 10% of the Company's share capital. This authorisation to acquire own shares may be exercised directly by pbb, Group entities (section 18 (1) of the AktG) subordinated to pbb, or third parties acting on behalf of pbb or on behalf of Group entities subordinated to pbb. This authorisation may be exercised fully or partially, and – in case of a partial exercise – more than once. This authorisation applies until 9 June 2020. The own shares may, at the discretion of the Management Board, be bought through a stock exchange or by means of a public purchase offer or by means of a public invitation to all shareholders to submit tenders described in more detail in the resolution of the Annual General Meeting of 10 June 2015.

The Management Board is authorised, with the consent of the Supervisory Board, to use any shares purchased on the basis of the authorisation described above for a disposal on the stock exchange or for an offer to all shareholders or to dispose against cash payment provided that the price may not be substantially lower than the stock price of the shares of the Company of the same kind by applying section 186 (3) sentence 4 of the AktG analogously, or to dispose against contribution in kind or to redeem the shares. The shareholders' subscription rights may be excluded as described in more detail in the resolution of the Annual General Meeting of 10 June 2015.

As at 31 December 2019, pbb neither held treasury shares nor equity derivatives.

As the authorisations to use authorised capital, to use conditional capital, to issue convertible bonds, warrant bonds, profit participation rights and hybrid bonds, and to acquire and use treasury shares (including equity derivatives) will expire in fiscal year 2020, the Management Board and Supervisory Board will submit corresponding resolution proposals to the Annual General Meeting for the renewal of these authoriations, which will be announced in good time with the invitation to the Annual General Meeting.

Material Company Agreements which are Subject to Change of Control Clauses Triggered in the Event of a Takeover Offer (Section 315a (1) No. 8 HGB)

pbb did not enter into material agreements which are subject to change of control clauses triggered in the event of a takeover offer.

Compensation Agreements Entered into with Members of the Management Board or Employees in the Event of a Takeover Offer (Section 315a (1) No. 9 HGB)

There are no compensation agreements within the meaning of Section 315 (4) No. 9 HGB that have been concluded with members of the Management Board or employees in the event of a takeover offer.

Corporate Governance Statement

The chapter "Corporate Governance Report and Corporate Governance Statement" has not been part of the audit carried out by the external auditors.

DECLARATION OF COMPLIANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE, PURSUANT TO SECTION 161 OF THE AKTG

Since 16 July 2015, Deutsche Pfandbriefbank AG ("pbb") shares have been listed on the Frankfurt Stock Exchange. Since that date, pbb has been subject to disclosure requirements pursuant to section 161 of the AktG. All declarations of compliance are available on the company's website: www.pfandbriefbank.com/en/investors/mandatory-publications.html The most recent Declaration of Compliance issued by the Management Board and the Supervisory Board was dated 27 February 2020.

Pursuant to section 161 (1) sentence 1 of the AktG, the Management Board and the Supervisory Board of pbb shall declare, on an annual basis, that the Company has complied with, and continues to comply with, the recommendations of the Government commission "German Corporate Governance Code", or which recommendations have not been (or are not being) complied with, stating reasons for any non-compliance (the concept of "comply or explain").

Accordingly, the Management Board and the Supervisory Board of pbb declare that pbb complied with the recommendations of the Government Commission "German Corporate Governance Code" (as amended on 7 February 2017 as well as based on the future wording, as amended on 16 December 2019, which has not yet been published in the German Federal Gazette) during the 2019 financial year, and continues to do so, with the following exceptions:

Recommendation C.10

The Chairman of the Supervisory Board and Chairman of the Remuneration Committee, Dr Günther Bräunig, was elected as a member of pbb's Supervisory Board following the proposal of the Federal Republic of Germany in 2009, which at that time indirectly held almost 100% of pbb shares. Therefore, as a precaution, Dr Günther Bräunig is not considered independent from the Company, although the Federal Republic of Germany already reduced its indirect shareholding in pbb (brokered through the Financial Market Stabilisation Fund – "FMS") to only 3.5% in 2018.

Recommendations G.1 and G.2

The service contracts entered into with each member of the Management Board comprise a total threshold value of annual remuneration. The total threshold value of annual remuneration comprises the basic annual remuneration, the variable remuneration and fringe benefits. Furthermore, statutory provisions provide for a limitation of the variable remuneration of banks to 100% of the fixed remuneration according to section 25a (5) sentence 1 of the German Banking Act (Kreditwesengesetz – "KWG"). The Annual General Meeting did not resolve to increase the limitation to 200% of the fixed remuneration, as permitted under section 25a (5) sentence 5 of the KWG.

Regarding section G.1 of the GCGC, to the extent that company pension schemes shall be considered in the total threshold value of annual remuneration, pbb hereby makes the following statement:

The defined benefit pension commitments granted by pbb for individual Management Board members amount to a pension of 5.2% of the basic annual remuneration for each completed year of service, subject to a cap of between 50% and 60% (depending on the respective Management Board member) of the last basic annual remuneration. By definition, defined benefit pension commitments are not based on fixed annual contributions, but are recognised based on service costs – which might fluctuate considerably, in particular amidst

the changing interest rate environment. Against this background, defined benefit pension commitments are not considered part of the total threshold value of annual remuneration within the meaning of section G.1 of the GCGC. The same applies to defined contribution pension commitments made by pbb to avoid an unequal treatment between beneficiaries of defined benefit and defined contribution pension plans.

Recommendation G.10

Referring to section G.10 of the GCGC, which stipulates that granted long-term variable remuneration components shall be accessible to Management Board members only after a period of four years, pbb hereby deviates from this rule, given that portions of the granted variable remuneration might be accessible before that period. However, the following consideration should be taken into account in this context:

The intention of the rules laid out in the GCGC, i.e. granting variable remuneration over a multiple-year period on a sustainable basis, is considered at pbb by applying compulsory performance measurement and disbursement regulations pursuant to the German Regulation on Remuneration in Financial Institutions (Institutsvergütungsverordnung – "InstVergV"), which ultimately go far beyond GCGC requirements in terms of granting remuneration on a long-term basis.

Firstly, target achievement at institutional level, which is the dedicating factor for the variable remuneration of Management Board members, depends on the company performance over three consecutive financial years.

Secondly, pbb's disbursement structure provides for the variable remuneration to be divided into a disbursement portion and a deferral portion. The disbursement amount for Management Board members amounts to 40% of their variable remuneration, with the deferral portion amounting to 60%.

50% of the disbursement amount is paid out in cash when the conditions for disbursement have been met. The remaining 50% is disbursed after a retention period of one year, after the amount was adjusted in line with the performance of the pbb share (sustainability component).

The deferral period for the deferral portion is five years. In the five years following establishment of the variable remuneration, the Supervisory Board takes a resolution, every year, regarding the granting of one fifth of the deferral portion as part of an ex-post variable remuneration review (ex-post risk adjustment). The beneficiary may not claim the relevant remuneration component until the end of each deferral period. As soon as the Management Board members have the right to claim a deferred remuneration component, half of the respective deferral portion is paid out in cash. The remaining half is retained for another year, and is adjusted again in line with the performance of the pbb share (sustainability component).

Effective 1 January 2018, the conditions to apply clawback options for variable remuneration already paid out was contractually agreed upon with all Management Board members.

Furthermore, section G.10 of the GCGC stipulates that the long-term variable remuneration amounts of Management Board members shall be largely invested in company shares by the respective Management Board member, or shall be granted as share-based remuneration. Given that these stipulations no longer exclusively refer to long-term variable remuneration amounts, pbb hereby deviates from the recommendation because half of the variable remuneration of pbb's Management Board members is share-based, which is less than the larger part.

Munich, February 27 2020

The Management Board The Supervisory Board

CORPORATE-GOVERNANCE-REPORT

pbb is a leading European specialist bank for commercial real estate finance; with an outstanding issuing volume of more than €27 billion, it ranks amongst the largest issuers of Pfandbriefe. pbb has been listed in the Prime Standard segment of the Regulated Market at the Frankfurt Stock Exchange since 16 July 2015; its shares have been included in the MDAX® index since 21 September 2015. pbb holds a General Meeting of shareholders at least once a year, giving all shareholders the opportunity to participate in the development and shape of the Company. As a significant institution, pbb is subject to the direct supervision of the European Central Bank.

The Bank has summarised the essential rules applicable to pbb Group in a framework on internal governance which is available not only to the Management Board and Supervisory Board, but also to all employees. Among other things, it comprises the composition and workflows of the Supervisory and Management Boards and their committees, the internal control guidelines, the Code of Conduct, and the handling of conflicts of interest.

Recommendations of the German Corporate Governance Code

pbb's current as well as previous Declarations of Compliance with the German Corporate Governance Code (the "Code"), pursuant to section 161 of the AktG, are permanently available on the Company's website: https://www.pfandbriefbank.com/en/investors/mandatory-publications.html.

Description of Management Board and Supervisory Board work processes

The Management Board informs the Supervisory Board, as well as the Supervisory Board committees, regularly and in a timely manner, about pbb Group's financial situation and performance. During meetings, the Supervisory Board receives reports on the risk position, risk management, new business, the liquidity strategy, as well as on significant events which are of material importance to the assessment of the Company's position, development and management.

The CEO maintains continuous contact with the Chairman of the Supervisory Board (or the Chairmen of the respective committees) with regard to important developments. Regular topics of discussion during Supervisory Board meetings additionally include developments in the lending business and the overall credit policy, all lending exposures which must be reported to the Supervisory Board, risk developments, risk management, business policy, as well as market trends and developments regarding the lending business and funding.

Management Board

The Management Board manages pbb's business in its own responsibility, and in accordance with the law, the Articles of Association, and the Internal Rules of Procedure for the Management Board (Geschäftsordnung). Moreover, the members of the Management Board observe the internal Code of Conduct, which applies for all members of staff and is publicly available on the Company's website.

During the year under review, the members of pbb's Management Board were responsible for the following portfolios:

- Andreas Arndt, CEO and CFO
- Thomas Köntgen, Deputy CEO, Real Estate Finance and Public Investment Finance
- Andreas Schenk, CRO
- Marcus Schulte, Treasurer

Members of the Management Board are bound to act in the interests of pbb; they must not pursue personal interests in their decision-making. During their term of office for pbb, they are bound to observe an extensive no-competition clause and are prohibited from exploiting opportunities available to the Company for their own benefit. Management Board members shall disclose conflicts of interest to the Chair of the Supervisory Board and to the Chair of the Management Board without undue delay, and shall inform the other members of the Management Board. No such conflicts of interest occurred during the year under review.

pbb does not grant any loans to Management Board members.

As far as pbb is aware, the members of the Management Board and their closely related parties did not hold any shares in the Company (or any financial instruments based thereon) during the year under review, to an extent that would have been reportable.

Supervisory Board
The Supervisory Board continuously monitors the Management Board, providing it with regular advice on the management of the Company. In accordance with the Memorandum and Articles of Association, the Supervisory Board consists of nine members, six of which are elected by shareholders and three by employees, in accordance with the German Act to Simplify the Election of Employee Representatives to the Supervisory Board (One-Third Employee Participation Act – Drittelbeteiligungsgesetz).

The current terms of office of shareholder representatives on the Supervisory Board will end upon the close of the Annual General Meeting in 2021, which resolves on the formal approval for the 2020 financial year. The next regular elections of employee representatives to the Supervisory Board are scheduled to take place in 2021.

The Supervisory Board elected Dr Günther Bräunig as its Chairman, and Dagmar Kollmann as his deputy.

The committees consist of the following members:

Name **Place of residence** Function in Supervisory Board Initial appointment	**Principal occupation** Functions in the Committees of the Supervisory Board	**Supervisory Board memberships and other directorships in 2019**
Dr. Günther Bräunig Frankfurt/Main, Germany Chairman 14.8.2009	**CEO of KfW** Chairman of the Executive and Nomination Committee and of the Remuneration Committee, Member of the Audit Committee	**Deutsche Post AG, Bonn, Germany –** Member of the Supervisory Board **Deutsche Telekom AG, Bonn, Germany –** Member of the Supervisory Board
Dagmar Kollmann Vienna, Austria Deputy Chairman 14.8.2009	**Entrepreneur** Chairman of the Audit Committee, Member of the Executive and Nomination Committee and of the Remuneration Committee and of the Risk Management and Liquidity Strategy Committee	**Deutsche Telekom AG, Bonn, Germany –** Member of the Supervisory Board **KfW IPEX-Bank GmbH, Frankfurt/Main, Germany –** Member of the Supervisory Board **Bank Gutmann AG, Vienna, Austria –** Member of the Supervisory Board (until 27.6.2019) **Unibail-Rodamco SE, Paris, France –** Member of the Supervisory Board Coca-Cola European Partners plc, London, UK – Member of the Supervisory Board (since 30.5.2019)
Dr. Jutta Dönges Frankfurt/ Main, Germany Member 21.6.2018	**Executive Board Member of Bundesrepublik Deutschland – Finanzagentur GmbH** Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee	**FMS Wertmanagement AöR, Munich, Germany – Deputy Chairman of the Supervisory Board** Erste Abwicklungsanstalt AöR, Düsseldorf, Germany – Member of the Supervisory Board (until 17.6.2019) Eurex Clearing AG, Frankfurt/Main, Germany – Member of the Supervisory Board
Dr. Thomas Duhnkrack Kronberg/Taunus, Germany Member 21.7.2015	**Entrepreneur** Member of the Audit Committee	**Hauck & Aufhäuser Privatbankiers AG, Frankfurt/Main, Germany – Member of the Supervisory Board**
Dr. Christian Gebauer-Rochholz Hochheim, Germany Employee Representative 21.11.2012	**Bank employee**	–
Georg Kordick Poing, Germany Employee Representative 22.2.1990	**Bank employee**	–
Joachim Plesser Ratingen, Germany Member 26.8.2014	**Consultant** Chairman of the Risk Management and Liquidity Strategy Committee, Member of the Executive and Nomination Committee and of the Remuneration Committee	Commerz Real Investmentgesellschaft mbH, Wiesbaden, Germany – Member of the Supervisory Board DIC Beteiligungs AG, Frankfurt/Main, Germany – Member of the Supervisory Board GEG German Estate Group AG, Frankfurt/Main, Germany – Member of the Supervisory Board (until 2.4.2019) Pandion AG, Cologne, Germany – Chairman of the Supervisory Board
Oliver Puhl Frankfurt/Main, Germany Member 13.5.2016	**Entrepreneur** Member of the Risk Management and Liquidity Strategy Committee	–
Heike Theißing Munich, Germany Employee Representative 7.7.2011	**Bank employee** Member of the Remuneration Committee	–

In accordance with section 5.4.1 of the GCGC (and recommendation C1 of the new GCGC), as part of its Rules of Procedure, the Supervisory Board has defined specific goals for its composition; furthermore, it resolved upon a profile of skills and expertise for the entire Board, which is available on the Company's website. In addition to these documents, the Supervisory Board has introduced a catalogue of criteria for new Supervisory Board members, which takes into account company-specific and professional requirements. Furthermore, the Supervisory Board adopted a guideline on the hiring process and suitability check for Management and Supervisory Board members as well as for key personnel (Suitability Policy). This Policy summarises and further specifies the relevant rules, for

example regarding the ongoing evaluation of individual and collective suitability. A guideline on fostering diversity in the Management Board and Supervisory Board supplements the Suitability Policy.

As a general rule, more than half of the shareholder representatives on the Supervisory Board shall be independent, in the Supervisory Board's opinion, from the Company, its Management Board and any controlling shareholder. The Supervisory Board should also not include more than two former members of the Management Board. Former Management Board members should not chair the Supervisory Board, or one of its committees. With the exception of Dr Jutta Dönges and Oliver Puhl, all shareholder representatives on the Supervisory Board were appointed at a point in time when pbb was wholly owned by Hypo Real Estate Holding GmbH, and thus indirectly by the German Financial Markets Stabilisation Agency (FMSA) and the Federal Republic of Germany. However, in the Supervisory Board's opinion, all of its members are presently considered independent, with the exception of Dr Günther Bräunig. Given the fact that in 2018 the Federal Republic of Germany already reduced its indirect shareholding in pbb (brokered through the Financial Market Stabilisation Fund – "FMS") to just 3.5%, and no other circumstances apply which may compromise independence, the Supervisory Board now considers Dr Jutta Dönges as an independent Supervisory Board member as well. Furthermore, no former member of the Management Board currently sits on the Supervisory Board.

The Supervisory Board has established four committees in order to perform its supervisory duties in an efficient manner: the Executive and Nomination Committee, the Audit Committee, the Risk Management and Liquidity Strategy Committee, and the Remuneration Committee.

The committees consist of the following members:

The members of the **Executive and Nomination Committee** are:
Dr Günther Bräunig (Chairman), Dagmar Kollmann and Joachim Plesser

The members of the **Audit Committee** are:
Dagmar Kollmann (Chairman), Dr Günther Bräunig, Dr Jutta Dönges and Dr Thomas Duhnkrack

The members of the **Risk Management and Liquidity Strategy Committee** are:
Joachim Plesser (Chairman), Dr Jutta Dönges, Dagmar Kollmann and Oliver Puhl

The members of the **Remuneration Committee** are:
Dr Günther Bräunig (Chairman), Dagmar Kollmann, Joachim Plesser and Heike Theißing

The Executive and Nomination Committee concerns itself with strategic and current issues affecting the Group, as well as with matters concerning the Management Board, for which it prepares corresponding proposals for the plenary meeting. It also advises the Supervisory Board, both regularly and when required, regarding issues of Management Board personnel and succession planning, the individual specifications of Management Board contracts, and submits corresponding recommendations to the Supervisory Board. To ensure long-term succession planning for the Management Board, the Executive and Nomination Committee regularly concerns itself, in cooperation with the members of the Management Board, with the further development of the respective skills profiles, and carries out potential analysis of new candidates when required. These activities are based on the internal Suitability Policy described before, and on pbb's Guideline on Fostering Diversity. In addition, the Committee prepares the examination of efficiency for the Management Board as well as the Supervisory Board and its committees. This includes the ongoing evaluation of individual and collective suitability, which forms the basis from which to identify any need for action. Moreover, it deals with the implementation of the under-represented gender quota for pbb's Supervisory Board and Management Board, and makes proposals for the succession of Supervisory Board members to be elected by shareholder representatives.

The Audit Committee is concerned with all accounting issues, as well as with the audit of pbb and pbb Group. It is responsible for the preparation, and monitors the audit, of the financial statements and

consolidated financial statements, the interim reports, as well as the reports submitted by Internal Audit and the external auditors regarding internal and external audit findings. Moreover, the Audit Committee discusses the impact of current regulatory issues with the Management Board; it concerns itself with the mandate for the external auditors and their audit plan, independence and fees. Furthermore, the Audit Committee submits proposals for the appointment of external auditors to the Supervisory Board, and prepares the Supervisory Board's proposals for the election of external auditors to the Annual General Meeting. The Audit Committee is also responsible for monitoring the effectiveness of the Internal Control System and of key controls implemented; it receives regular reports on current litigation, Compliance issues, data protection and IT security, notable accounting issues, as well as the audit plan established by Internal Audit and its implementation.

The Risk Management and Liquidity Strategy Committee supports the Supervisory Board's supervision of risk management and liquidity management; it concerns itself with the risk strategy, reviews the Management Board's risk reporting, and is involved in the credit approval process to the extent laid down in the Rules of Procedure. The committee also regularly discusses new business developments as well as the liquidity and funding status; it looks at all types of risks associated with the banking business, such as credit, market, liquidity and operational risks, taking the Group's risk-bearing capacity into account. The Committee also concerns itself with the syndication business, foreclosures and development financings, with write-downs of financial assets affected by impaired creditworthiness, the reporting of own funds in accordance with the German Solvency Regulation, country limits, and asset/liability management. In addition, it deals with individual loans requiring approval under the Internal Rules of Procedure for the Management Board, with new business, regular re-submissions and approvals for change applications.

The Remuneration Committee monitors whether remuneration systems for the Management Board and for the Bank's employees are appropriate, and prepares the corresponding Supervisory Board resolutions. Furthermore, it deals with the remuneration report, the agreement of targets for Management Board members, and for examining and identifying staff that have risk-taking functions.

In the year under review, the Supervisory Board assured itself in all cases that the management measures taken by the Management Board were lawful, appropriate, due and proper. The Management Board fulfilled its information and reporting duties, pursuant – inter alia – to the Memorandum and Articles of Association, and informed the Supervisory Board (and/or its committees) in a regular, timely and comprehensive manner, both in writing and orally, about matters and measures relevant to the Company. This also included information on any deviations between target and actual figures or developments. The members of the Supervisory Board had sufficient opportunity, at all times, to critically assess the reports and proposed resolutions submitted by the Management Board, and to make their own suggestions during Supervisory Board committee meetings and in the plenary sessions.

In particular, the Supervisory Board held in-depth discussions on, and reviewed the plausibility of, all business transactions material to the Company on the basis of written and oral reports provided by the Management Board.

The members of the Supervisory Board generally take responsibility for undertaking any training or professional development measures necessary to fulfil their duties. The Company supports them to the extent required in this regard. Since 2018, regular training for Supervisory Board and Management Board members is also provided ahead of the ordinary Supervisory Board meetings through presentations by external speakers. In the 2019 financial year, the annual training programme comprised four sessions covering a wide range of topics (SREP, digitalisation, cyber risk/social engineering, start-ups and digital platforms).

Due to offices they hold with other parties, particularly credit institutions and real estate investors, some of the Supervisory Board members may conceivably have conflicts of interest which require disclosure to the Supervisory Board, particularly regarding conflicts of interest which may arise due to advice given to, or an office held with clients, suppliers, lenders or other parties. To the extent that

Supervisory Board members or their related parties maintain relationships with clients and/or relationships with other credit institutions, the Supervisory Board's Rules of Procedure provide regulations to avoid or mitigate conflicts of interest, such as the disclosure of imminent conflicts of interest or the waiver of voting rights.

pbb does not grant any loans to Supervisory Board members.

As far as pbb is aware, the members of the Supervisory Board and their closely related parties did not hold any shares in the Company (or any financial instruments based thereon) during the year under review, to an extent that would have been reportable.

During the financial year under review, the Supervisory Board examined the efficiency of its work in line with the requirements of section 25d (11) of the KWG, drawing on external support for this purpose. This included, amongst other things, the use of questionnaires for the ongoing evaluation of individual and collective suitability of Supervisory Board members. At the Supervisory Board meeting held on 27 February 2020, the results of the Supervisory Board and Management Board evaluations for 2019 were discussed, and measurement recommendations were derived. The requirements for the composition of the Supervisory Board regarding competence, age and diversity, as laid out in the profile of skills and expertise, are considered fulfilled overall.

In line with the recommendations of the Code, the Chairman of the Supervisory Board does not chair the Audit Committee: this position is held by Ms Dagmar Kollmann. Ms Kollmann fulfils the requirements as set in the Supervisory Board's Rules of Procedure according to which the chair of the Audit Committee must fulfil the requirements established in section 25d (9) sentence 3 of the KWG and section 5.3.2 of the GCGC (and recommendation D.3 of the new GCGC), and shall in particular have expertise in accounting and auditing as well as specific knowledge and experience in applying accounting principles and internal control procedures.

When making proposals in accordance with the Suitability Policy to the Annual General Meeting for the election of new Supervisory Board members, the Supervisory Board ensures that the proposed candidates fulfil the professional and personal requirements applicable to the respective position, and coincide with the specific goals for the composition of the Supervisory Board derived from the profile of skills and expertise for the entire Board, taking into account the knowledge of the respective candidate. Furthermore, the Supervisory Board makes sure that the respective candidates are able to provide the time required for the position.

For further details on the work of the Supervisory Board, please refer to the Report of the Supervisory Board, which forms part of this Annual Report

Other Disclosures Regarding Corporate Governance Standards

Transparency

Information provided by pbb on its website includes all key details regarding the financial statements and consolidated financial statements, the half-yearly report, quarterly reports or statements, and the financial calendar. Within the framework of Investor Relations activities (such as roadshows) as well as via Corporate Communications, the Group provides additional, regular information on corporate developments. This includes mandatory disclosures such as voting rights and ad-hoc disclosures. The Corporate Governance Statement (including the Declaration of Compliance with the German Corporate Governance Code) is permanently available on pbb's website.

Risk Management

Risk management and risk control are key tasks within the scope of pbb's overall bank management. Through the business and risk strategy, the Management Board sets the framework for pbb's risk appetite and risk-bearing capacity in its business activities. Monthly risk reports to the Management Board provide an extensive analysis of the Bank's overall risk situation: adjustments are made where

necessary. The Supervisory Board is informed about the risk situation on a regular basis, at least once a quarter.

Compliance

Transparent, fair, responsible and honest conduct – with the required degree of skills, professionalism and integrity in dealings with one another and in relation to clients and business partners, competitors and the public – provide the foundation for pbb's business success: this trust is not least based upon implementation of, and compliance with, relevant statutory, regulatory and internal rules. Besides adherence to the legal and regulatory requirements, the Code of Conduct sets out the ethical and legal framework within the Company. This Code of Conduct therefore serves for voluntary self-monitoring, while at the same time providing guidance for our employees. The Code of Conduct contains the indispensable requirements which apply to all of pbb's staff. In addition, as part of the compliance organisation, precautions have been taken to ensure compliance with data protection rules, as well as to prevent money laundering, the financing of terrorism, insider trading, and any other prohibited and/or criminal acts. pbb's employees receive regular training courses on the prevention of money laundering and other criminal offences, and on compliance and data protection issues.

Sustainability

Companies must assume responsibility for their actions in the environment in which they operate. The key principle of pbb Group's corporate responsibility philosophy is that of sustainability. This means long-term, responsible actions that take the consequences for all the company's stakeholders and for the environment into account. pbb Group is convinced that sustainable and responsible business practices are essential when it comes to securing the company's future and increasing its value. For further details on pbb's sustainability strategy, please refer to the Non-Financial Report which is included in this Annual Report.

Remuneration Report

As part of pbb's Annual Report, the Remuneration Report outlines the structure of remuneration systems for the Supervisory Board, the Management Board, and employees. This includes a description of Supervisory Board remuneration, in accordance with the Memorandum and Articles of Association; remuneration for the Management Board is broken down into monetary remuneration, ancillary benefits, and pension benefits, and is shown individually for each Management Board member. For details on share option programmes or other share-based incentive systems of the Company, please refer to pbb's Remuneration Report. The quantitative remuneration information to be disclosed in compliance with Article 450 of the Capital Requirement Directive ("CRR") in conjunction with section 16 of the German Regulation on Remuneration in Financial Institutions (Institutsvergütungsverordnung – "IVV") is constantly available at the company's website, under www.pfandbriefbank.com.

Related Party Transactions

Please refer to the notes of the consolidated financial statements for further information regarding related party transactions.

Accounting policies

pbb prepares its annual financial statements in accordance with the provisions of the German Commercial Code (Handelsgesetzbuch – "HGB"); its consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted in the European Union. The Management Board prepares the annual and consolidated financial statements. The external auditors submit their report on the audit of the annual financial statements and consolidated financial statements to the Supervisory Board. The Annual General Meeting appointed KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG) as the external auditors for the 2019 financial year. Having

ascertained the independence of the external auditors, the Supervisory Board appointed the external auditors and defined the focal points of the audit. Details regarding the fees paid to the external auditors are provided in the notes to the consolidated financial statements.

KPMG, auditors of the annual and consolidated financial statements elected by the Annual General Meeting, audited the Annual Financial Statements and Consolidated Financial Statements as well as the Combined Management Report of pbb as at 31 December 2019, and issued them with an unqualified audit opinion. The Non-Financial Statement, which pbb is required to submit as part of the Management Report pursuant to sections 315b et seq. and 289b et seq. of the HGB, was published in a separate Non-Financial Report included in the present Annual Report. In the context of its audit obligation as per section 171 (1) of the German Stock Corporation Act (AktG), the Supervisory Board made use of the possibility of a content-related external audit of the non-financial statement according to section 111 (2) sentence 4 of the AktG, carried out by KPMG in the course of a separate appointment. KPMG has submitted a declaration of its independence to the Supervisory Board.

All Supervisory Board members received the financial statements documents and audit reports in good time. The Audit Committee addressed the financial statements documents in its meeting on 17 March 2020. The Annual Financial Statements and Consolidated Financial Statements, the Combined Management Report as well as audit reports were discussed in detail with the Management Board and representatives of the external auditors. Following its own review, the Supervisory Board did not raise any objections to the audit results submitted by the external auditors. In the accounts review meeting held on 18 March 2020, it approved the Consolidated Financial Statements prepared by the Management Board, and the Annual Financial Statements were adopted. Details regarding the examinations carried out by the Supervisory Board, and the results of such examinations, are provided in the Report of the Supervisory Board.

Diversity, and disclosures pursuant to section 289f (2) nos. 4 to 6 of the HGB

In its Code of Conduct (which is also published on pbb's website), pbb Group has committed itself to respect all people, independent of age, sex, race, social background, skills, sexual orientation or religion. The Group welcomes and fosters diversity amongst its staff and management bodies – this includes safeguarding the principle of equal opportunity, whilst rejecting discrimination of any kind. Since 2010, pbb has been a signatory to the Diversity Charter. The Diversity Charter binds its signatories to creating a working environment free of prejudice and exclusion, and to establish an open corporate culture based upon mutual respect and diversity. Diversity with regard to age, sex, educational and professional background as well as national identities is an important requisite for pbb Group's competitiveness and sustainable business success.

When appointing the Company's executives, Management Board and Supervisory Board consider the principle of diversity within the scope of their long-term succession planning and appointment decisions. pbb Group especially considers different, complementary profiles, professional and life experiences – also in the international area – as well as an appropriate gender representation in the executive bodies, as factors of diversity in the makeup of the Management Board and Supervisory Board. In its Internal Rules of Procedure, and based on catalogues of criteria concerning personal aptitude and professional skills for new members of the Management Board and Supervisory Board, the Supervisory Board has adopted standards for its composition and the qualification of its members. These standards are supplemented by the skills profile for the Supervisory Board – adopted in 2017 – and by the guidelines on the suitability check for Management and Supervisory Board members as well as on fostering diversity in the Management Board and Supervisory Board - adopted in 2018.

In principle, every candidate must be reliable and sufficiently qualified; he or she must be able to ensure sufficient availability to exercise his or her office. Besides holding the necessary professional skills with regard to management and sector experience, candidates shall be trustworthy and of high integrity. Likewise, the selection of candidates shall take their requisite independence into account. Where several candidates are being considered, the goal of achieving maximum diversity shall also be

considered. Moreover, the composition of executive bodies is supposed to reflect pbb Group's international activities as well as the structure of the workforce.

Specific requirements exist with regard to the age and gender of Supervisory Board and Management Board members. For instance, the members of the Management Board should generally not be older than 60 years. With the exception of Andreas Arndt, who has exceeded the age limit of 60 years during the term of his current appointment, all current Management Board members satisfy this requirement. The Supervisory Board consciously accepted this in order to safeguard stability in the composition of the Management Board after privatisation was completed, as well as to secure Mr Arndt's long-standing experience for pbb.

As a rule, the members of the Supervisory Board should not be older than 70 years, and the term of office of a Supervisory Board member should generally end upon the close of the ordinary Annual General Meeting following their reaching the age of 70. The maximum length of membership on the Supervisory Board shall generally be limited to three full terms of office within the meaning of section 102 (1) of the AktG. In principle, pbb currently complies with these rules, except for one case where the term of office will end later than upon the close of the ordinary Annual General Meeting following the member reaching the age of 70 (Joachim Plesser, whose term of office will end upon the close of the Annual General Meeting 2021, which will resolve on formal approval for the 2020 financial year).

A key aspect of the diversity concept pursued by pbb is the issue of gender balance: in principle, when appointing executive staff, pbb Group endeavours to ensure that the under-represented gender is appropriately represented. The Supervisory Board accordingly set the following target levels, most recently in November 2017, which are applicable until 30 June 2022:

- Target female quota for Supervisory Board members: 30%
- Target female quota for Management Board members: 20%

As at 31 December 2019, the quota of women within the Supervisory Board remained unchanged compared to the previous year's reporting date (33.3%). Mr Schulte was appointed as member of the Management Board effective 1 January 2019; given that no other changes to the composition of the Management Board applied, the female quota remained at 0% during the course of the year. The Supervisory Board maintains its endeavours to ensure the respective under-represented gender is appropriately represented when filling vacancies on the Management Board, in a targeted manner – given candidates who have the requisite skills and qualifications. However, in view of the terms of Management Board members' service contracts (which run at least until year-end 2020), and considering the appointment of Marcus Schulte to the Management Board on 1 January 2019 after the two-year introduction phase, any short-term changes in the present composition of the Management Board is hardly feasible.

The Management Board has set target female quotas for the first and second management levels below the Management Board, most recently in October 2017; the Management Board aims to achieve these targets by 30 June 2022:

- Target female quota for the first management level below the Management Board: 15%
- Target female quota for the second management level below the Management Board: 15%

As in the two previous years, the female quotas for the first and second management levels below the Management Board increased again during the period under review. At the first management level below the Management Board, the target female quota was already achieved. On 31 December 2019, 15.0% of first-level managers and 11.7% of second-level managers were women. pbb maintains its intention to raise the number of women in executive positions, and to ensure women are appropriately represented when filling vacancies, in a targeted manner – given candidates who have the requisite skills and qualifications. A higher awareness for this topic, across all levels of hierarchy, together with a corresponding management and corporate culture, also contribute to this objective. Moreover, pbb

offers employees attractive working conditions – especially flexible working hours and teleworking opportunities, which help to balance family and working life. In 2019, pbb Group introduced new, practical and day-to-day supporting measures, aimed at continuing to promote the compatibility of family and working life. Please refer to the Non-Financial Statement for further details.

Disclosures pursuant to section 289a (2) no. 5 of the HGB

Given that the Company is subject to the One-Third Employee Participation Act (DrittelBG), no disclosure pursuant to section 289a (2) no. 5 of the HGB is required.

Consolidated Financial Statements

Income Statement

Income statement

in € million	Note	2019	2018
Net interest income[1]	34	458	450
Net fee and commission income	35	6	6
Net income from financial instruments at fair value through profit or loss (net income from fair value measurement)[2]	36	-7	-9
Net income from derecognition of financial instruments not measured at fair value through profit or loss (net income from realisations)[2]	37	48	32
Net income from hedge accounting	38	-2	-1
Net other operating income	39	3	-7
Net income from allowances for credit losses on financial assets (net income from risk provisioning)[2]	40	-49	-14
General and administrative expenses	41	-202	-193
Expenses from bank levies and similar dues	42	-24	-25
Net income from write-downs and write-ups of non-financial assets	43	-18	-15
Net income from restructuring	44	3	-9
Profit before tax		**216**	**215**
Income tax	45	-37	-36
Net income		**179**	**179**
attributable to: Shareholders of pbb		179	179

[1] Interest income of €1,766 million (2018: €1,834 million) in total includes interest income of €1,282 million (2018: €1,310 million) from financial instruments not measured at fair value through profit or loss (IAS 1.82a).
[2] Solely the condensed and parenthesised line item descriptions are used subsequently.

Earnings per share

in €	Note	2019	2018
Basic earnings per share	47	1.20	1.24
Diluted earnings per share	47	1.20	1.24

Statement of Comprehensive Income

Statement of comprehensive income

in € million	2019	2018
Net income	**179**	**179**
Accumulated other comprehensive income	-48	-43
Items that will not be reclassified to profit or loss, net of tax	-26	2
Gains/losses on pension commitments, before tax	-36	3
Income tax relating to items that will not be reclassified to profit or loss	10	-1
Items that may be reclassified to profit or loss, net of tax	-22	-45
Gains/losses on cash flow hedge accounting, before tax	-16	-31
unrealised gains/losses	-	-
gains/losses reclassified to profit or loss	-16	-31
Gains/losses on financial assets at fair value through other comprehensive income, before tax	-15	-31
unrealised gains/losses	-15	-31
gains/losses reclassified to profit or loss	-	-
Income tax relating to items that may be reclassified to profit or loss	9	17
Comprehensive income for the period	**131**	**136**
attributable to: Shareholders	131	136

Statement of Financial Position

Assets

in € million	Note	**31.12.2019**	**31.12.2018**	**1.1.2018**
Cash reserve	9, 48	1,141	1,388	999
Financial assets at fair value through profit or loss	10, 49	1,306	1,659	1,735
Positive fair values of stand-alone derivatives		717	749	870
Debt securities		130	258	333
Loans and advances to customers		456	649	529
Shares in investment funds qualified as debt instruments		3	3	3
Financial assets at fair value through other comprehensive income	11, 50	1,696	1,984	2,182
Debt securities		1,325	1,564	1,735
Loans and advances to other banks		15	16	17
Loans and advances to customers		356	404	430
Financial assets at amortised cost after credit loss allowances	12, 51	50,224	50,341	50,323
Financial assets at amortised cost before credit loss allowances		50,351	50,453	50,427
Debt securities		7,679	8,039	8,667
Loans and advances to other banks		2,356	2,231	2,400
Loans and advances to customers		40,316	40,183	39,360
Credit loss allowances on financial assets at amortised cost		-127	-112	-104
Positive fair values of hedge accounting derivatives	13, 52	2,199	2,207	2,678
Valuation adjustment from porfolio hedge accounting (assets)	14, 53	19	2	-1
Tangible assets	15, 54	45	4	6
Intangible assets	16, 55	39	37	36
Other assets	17	41	35	34
Current income tax assets	27	22	26	42
Deferred income tax assets	27	90	86	71
Total assets		**56,822**	**57,769**	**58,105**

Liabilities and equity

in € million	Note	**31.12.2019**	**31.12.2018**	**1.1.2018**
Financial liabilities at fair value through profit or loss	18, 57	762	881	1,040
Negative fair values of stand-alone derivatives		762	881	1,040
Financial liabilities measured at amortised cost	19, 58	49,741	50,714	50,919
Liabilities to other banks		4,195	3,867	3,797
Liabilities to customers		23,985	24,901	26,244
Bearer bonds		20,858	21,237	19,876
Subordinated liabilities		703	709	1,002
Negative fair values of hedge accounting derivatives	20, 59	2,562	2,538	2,805
Valuation adjustment from porfolio hedge accounting (liabilities)	21, 60	81	23	-
Provisions	22, 61	263	268	247
Other liabilities	23	130	40	70
Current income tax liabilities	27	47	48	57
Liabilities		**53,586**	**54,512**	**55,138**
Equity attributable to the shareholders of pbb	24, 64	2,938	2,959	2,967
Subscribed capital		380	380	380
Additional paid-in capital		1,637	1,637	1,637
Retained earnings[1]		966	939	904
Accumulated other comprehensive income		-45	3	46
thereof: allowances for credit losses on financial assets at fair value through other comprehensive income		-	1	1
Additional equity instruments (AT1)		298	298	-
Equity		**3,236**	**3,257**	**2,967**
Total equity and liabilities		**56,822**	**57,769**	**58,105**

[1] Adjusted according to IAS 8.14. Details are disclosed in note "Consistency".

Statement of Changes in Equity

Statement of changes in equity

	Equity attributable to the shareholders							
				Accumulated other comprehensive income (OCI) from:				
in € million	Subscribed capital	Additional paid-in capital	Retained earnings [1]	Pension commit-ments	Cash flow hedge accounting	Financial assets at fair value through OCI	Additional equity instruments (AT1 capital)	**Equity**
Balance at 1.1.2018	**380**	**1,637**	**904**	**-75**	**22**	**99**	**-**	**2,967**
Capital increase	-	-	-	-	-	-	300	300
Transaction costs	-	-	-	-	-	-	-2	-2
Distribution	-	-	-144	-	-	-	-	-144
Comprehensive income for the period	-	-	179	2	-22	-23	-	136
Net income	-	-	179	-	-	-	-	179
OCI for the period, after taxes	-	-	-	2	-22	-23	-	-43
Balance at 31.12.2018	**380**	**1,637**	**939**	**-73**	**-**	**76**	**298**	**3,257**
Balance at 1.1.2019	**380**	**1,637**	**939**	**-73**	**-**	**76**	**298**	**3,257**
Distribution	-	-	-134	-	-	-	-	-134
Payment on AT1 capital	-	-	-18	-	-	-	-	-18
Comprehensive income for the period	-	-	179	-26	-11	-11	-	131
Net income	-	-	179	-	-	-	-	179
OCI for the period, after taxes	-	-	-	-26	-11	-11	-	-48
Balance at 31.12.2019	**380**	**1,637**	**966**	**-99**	**-11**	**65**	**298**	**3,236**

[1] Adjusted according to IAS 8.14. Details are disclosed in note “Consistency”.

Statement of Cash Flows

Statement of cash flows[1]

in € million	2019	2018
Net income/loss	**179**	**179**
Write-downs and depreciation on tangible and intangible assets	18	15
Write-downs, provisions for losses on, and write-ups of, financial assets at amortised cost	52	8
Impairment / Revaluation on Financial Instruments measured at Fair Value OCI	-1	-
Result from the disposal of financial securities at amortised cost	1	-
Result from the disposal of financial securities at fair value through other comprehensive income	1	1
Change in other non-cash positions	255	139
Other adjustments	-422	-414
Subtotal	**83**	**-72**
Change in assets and liabilities from operating activitiesafter correction of non-cash compo-nents		
Increase in assets/decrease in liabilities (-)		
Decrease in assets/increase in liabilities (+)		
Financial instruments at fair value through profit or loss and positive/negative fair values of hedge accounting derivatives	-111	-167
Financial assets at fair value through other comprehensive income	33	8
Financial instruments at amortised cost (without payments in/of subordinated capital)	-1,185	-298
Other assets from operating activities	-6	-
Other liabilities from operating activities	-71	-106
Interest income received	1,992	2,120
Interest expense paid	-1,597	-1,702
Taxes on income paid/refund	-19	-28
Cash flow from operating activities	**-881**	**-245**
Proceeds from the sale of securities	868	775
Payments for the acquisition of securities	-50	-
Payments for the acquisition of tangible and intangible assets	-19	-14
Cash flow from investing activities	**799**	**761**
Proceeds from additional equity instruments (AT1)	-	298
Disbursement of dividends	-134	-144
Payments in/of subordinated liabilities	-5	-281
Payments from Leasing Liabilities	-8	-
Payment on AT1 capital	-18	-
Cash flow from financing activities	**-165**	**-127**
Cash and cash equivalents at the end of the previous period	1,388	999
+/- Cash flow from operating activities	-881	-245
+/- Cash flow from investing activities	799	761
+/- Cash flow from financing activities	-165	-127
+/- Effects of exchange rate changes	-	-
Cash and cash equivalents at the end of the period	**1,141**	**1,388**

[1] Explanations in Note "Notes to the Items in the Consolidated Statement of Cash Flows".

Notes

1 General Information

Deutsche Pfandbriefbank AG (pbb) with its registered office in Munich, is a leading provider of commercial real estate finance and public investment finance. The Company is registered in the commercial register of the Amtsgericht (local court) Munich (HRB 41054) and represents the ultimate parent company of the Deutsche Pfandbriefbank Group (pbb Group).

The financial statements are stated in euros, the presentation currency of pbb Group, and principally rounded to millions of Euro (€ million). Information is presented in accordance with the principle ofmateriality. Minor differences may occur regarding the figures and totals stated due to rounding. All items under € 500,000.00 are presented as zero respectively zero balances are denoted by a dash.

The Management Board of pbb prepared and authorised for these Consolidated Financial Statements for issue on 3 March 2020.

ACCOUNTING POLICIES

2 Principles

pbb has prepared the present Consolidated Financial Statements for the period ending 31 December 2019 in line with EC ordinance No. 1606/2002 of the European Parliament and Council of 19 July 2002 in accordance with International Financial Reporting Standards (IFRS). The IFRS are standards and interpretations adopted by the International Accounting Standards Board (IASB). These are the International Financial Reporting Standards (IFRS), the International Accounting Standards (IAS) and the interpretations of the IFRS Interpretations Committee (formerly IFRIC) respectively the former Standing Interpretations Committee (SIC); they are also based on the regulations of commercial law which are applicable in accordance with Section 315e (1) HGB (German Commercial Code).

The Consolidated Financial Statements are based on IFRS as adopted in European law by the European Commission as part of its endorsement process. With the exception of certain regulations on fair value hedge accounting for a portfolio hedge of interest rate risks in IAS 39 Financial Instruments: Recognition and Measurement, all the IFRS published by the IASB and required to be applied were fully endorsed by the European Union (EU). According to the option pursuant to IFRS 9.7.2.21 ppb Group still applies the requirements of IAS 39 for hedge accounting instead of the requirements in chapter 6 of IFRS 9. Within the framework of fair value hedge accounting for a portfolio hedge of interest rate risks, pbb Group applies a part of the exemptions permitted under European law. Therefore, the present consolidated financial statements comply with IFRS applicable in the EU, but not with IFRS as a whole as promulgated by the IASB.

In addition, the German Accounting Standards (Deutsche Rechnungslegungs Standards – DRS) published by the Accounting Standards Committee of Germany (Deutsche Rechnungslegungs Standards Committee – DRSC) have been taken into account provided they are not inconsistent with the IFRS.

Initially Adopted IFRS, Interpretations and Amendments in 2019
pbb Group implemented all standards and interpretations which had to be applied mandatorily and which had been endorsed into European law. However, pbb Group has occassionally waived to disclose issues that are not relevant or not material to assure understandibility and information content in the present annual report.

pbb Group initially applied the following new and amended IFRS and published IFRIC in the financial year 2019:

- IFRS 16: Leases
- IFRIC 23: Uncertainty over Income Tax Treatments
- Amendments to IFRS 9: Prepayment Features with Negative Compensation
- Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures
- Amendments to IAS 19: Plan Amendment, Curtailment or Settlement
- Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7
- Annual Improvements to IFRS Standards 2015-2017 Cycle

IFRS 16: Leases The new standard on lease accounting replaced the former lease standards IAS 17 as well as the interpretations IFRIC 4, SIC-15 and SIC-27. According to IFRS 16, lessees shall recognise all leases as well as the associated contractual rights and obligations. However, the new standard provides options according to which exemptions apply to leases with lease terms of 12 months or less, and to low-value leases. In contrast to the regulations of the now replaced standard IAS 17, in accordance with IFRS 16 lessees no longer separate leases into operating and finance lease categories; instead, lessees recognise lease liabilities in the amount of the discounted future lease payments. Simultaneously, lessees recognise right-of-use assets in the amount of the present value of future lease payments plus any directly attributable costs. Right-of-use assets depreciate over the projected useful life.

The approach to lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Moreover, IFRS 16 comprises detailed regulations on sale-and-leaseback transactions as well as on the disclosure of lease modifications and reassessments without contractual modifications. In addition, disclosure requirements for lessees and lessors were extended compared to IAS 17.

Upon first-time application, pbb Group applied the modified retrospective transition regulations permitted under IFRS 16 without adjusting the comparable figures for the previous financial year. Please refer to the “Leases” note for further information on the implementation of IFRS 16 at pbb Group and its implications for the consolidated financial statements.

IFRIC 23 Uncertainty over Income Tax Treatments This interpretation is especially used to achieve a clear and uniform accounting policy for the recognition and measurement of tax liabilities and assets in uncertain tax situations. There have not been effects from the initial application. It is possible that there may be effects in future periods which have not been assessed definitely.

Amendments to IFRS 9: Prepayment Features with Negative Compensation The amendments to IFRS 9 shall enable a measurement at amortised cost or fair value through other comprehensive income also for such financial assets with prepayment options at which one party gets or pays an appropriate compensation (appropriate negative compensation) at termination. There were no effects from the initial application as pbb Group does not hold relevant contracts for the scope of the amendment.

Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures The amendments of IAS 28 clarify that IFRS 9 has to be applied on long-term interests in an associate or joint venture to which the equity method is not applied. pbb Group already accounted for such interests at fair value through profit or loss so that there were no effects from the initial application.

Amendments to IAS 19: Plan Amendment, Curtailment or Settlement The amendments concern the accounting of amendments, curtailments or settlements of a defined benefit plan. Such changes of defined benefit plans are rather unusual in pbb Group. There have not been effects from the initial application in pbb Group.

Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform With the publication of the amendments, the IASB completed the first phase of the project "IBOR Reform and its Effects on Financial Reporting". The amendments address accounting issues in the run-up to the changeover to alternative benchmark interest rates and are aimed at continuing existing hedge accounting relationships. The hedging relationships can continue to exist or be designated despite the uncertainty due to the expected replacement of the reference interest rates and the resulting reduced prospective effectiveness. The amendments were endorsed by the EU on 16 January 2020 and entered into force retrospectively as of 1 January 2020. pbb Group is already voluntarily applying the IASB's "Interest Rate Benchmark Reform - Amendments to IFRS 9, IAS 39 and IFRS 7" to assess the retrospective and prospective effectiveness of hedging relationships for the reporting period ending 31 December 2019.

Annual Improvements to IFRS Standards 2015 – 2017 Cycle The annual improvements contain several minor amendments to standards especially IFRS 3, IAS 12 and IAS 23 from which pbb Group has not been materially affected.

IFRS, Interpretations and Amendments endorsed by the EU but not yet effective
With the exception of the IASB announcement “Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7” pbb Group does not an early adoption of standards, interpretations and amendments, which will be applicable in future financial years. The following standards, amendments and interpretations were endorsed by the EU as of the balance sheet date, but their application is not yet required:

Name	Publication	Initial application	Expected effects
Amendments to References to the Conceptual Framework in IFRS Standards	29.3.2018	1.1.2020	Identified regulatory gaps were closed and contents were updated by the revision of the framework. For example, changes occurred with respect to the definition criteria and the recognition of assets and liabilities and the distinction of net income of the period and other comprehensive income. There will not be material effects from the changes on pbb Group’s financials.
Amendments to IFRS 3 Business Combinations	22.10.2018	1.1.2020	Difficulties of companies when determining whether they have acquired a business or a group of assets were the reason for the changes. The distinction has an effect on subsequent questions like the accounting of goodwill. Currently, there are no effects in pbb Group. In future, the changes may be relevant depending on potential business combinations.
Amemdments to IAS 1 and IAS 8: Definition of Material	31.10.2018	1.1.2020	The IASB clarified the definition of “material” and aligned the definition used in the conceptual framework and the standards themselves. There will not be material effects on pbb Group.

IFRS, Interpretations and Amendments issued but not yet endorsed by the EU
The following standards, interpretations or amendments have not yet been endorsed by the European Union at the balance sheet date:

Name	Publication	Initial application	Expected effects
IFRS 17 Insurance Contracts	18.3.2017	1.1.2021	IFRS 17 regulates the principals in relation to recognition, measurement and disclosure as well as notes for insurance contracts. At the moment pbb Group does not expect material effects as pbb Group does not operate as an insurance provider.

Statement of compliance for the German Corporate Governance Code
Company's Management Board and the Supervisory Board published a statement of compliance for the German Corporate Governance Code in this annual report as well as on pbb's website (http://www.pfandbriefbank.com/en/investors/mandatory-publications.html).

Combined Management Report
The combined management report meets the requirements of section 315 (1) and (2) HGB and DRS 20. It comprises fundamental information about the Group, a report on the economic position, a risk and opportunity report, a report on expected developments, commentary on pbb's unconsolidated Annual Financial Statements under HGB and supplemental information. The risk and opportunity report contains information which, under IFRS 7, is required to be disclosed.

3 Consistency

pbb Group applies its accounting policies on a consistent basis in accordance with the Conceptual Framework for Financial Reporting as well as IAS 1 and IAS 8. Apart from the adjustments described below the same accounting and measurement principles were applied as at 31 December 2019.

- In line with IAS 8.14, pbb Group made changes to the equity line items as from financial year 2019. The former line items "consolidated profit" and "retained earnings" were consolidated into "retained earnings". These disclosure amendments were due to the first-time AT1 capital payment made in April 2019, which meant that the amount disclosed as consolidated profit was not in line with the profit after tax disclosed in the income statement. Disclosing two different profit amounts would be misleading from pbb Group's perspective. The new disclosure approach is in line with the disclosure structure of other AT1 capital issuers. The prior-year figures were adjusted in accordance with IAS 8.22. Effective 31 December 2018, consolidated profit (€179 million) was added to the carrying amount of retained earnings (€760 million), resulting in a new carrying amount of retained earnings of €939 million. Effective 1 January 2018, consolidated profit stood at €182 million, and retained earnings (former disclosure structure) at €722 million, resulting in a new carrying amount of retained earnings of €904 million.
- According to IFRS 9 the gross carrying amount equals the the amortised cost of a financial asset, before adjusting for any loss allowances. The amortised cost of a financial asset is defined as the amount at which the financial asset is measured at initial recognition minus the prinicipal payments, plus or minus the cumulative amortisation using the effect interest method of any difference between that initial amount and the maturity amount adjusted for any loss allowance. In the past, pbb Group recognised any effects resulting from fair value adjustments not attributable to amortised cost in the gross carrying amount of financial assets measured fair value through other comprehensive income. However, in the consolidated financial statements 2019, pbb Group corrected the disclosed gross carrying amounts for these effects, and adjusted the comparable figures for the previous financial

year, in line with IAS 8.42. Accordingly, the gross carrying amount disclosed as at 31 December 2018 declined by €103 million, from €1,984 million to €1,881 million (1 January 2018: decline by €135 million, from €2,182 million to €2,047 million).

- To date, pbb Group reported the remaining term of derivatives settled via Eurex Clearing AG according to the netting mechanisms disclosed in the statement of financial position. The Group's approach was to allocate the non-netted nominal amount to the shortest maturity bucket of the netting portfolio. The disclosure of remaining terms was corrected in the 2019 financial year in line with IAS 8.42. Going forward, the non-netted nominal amount will be allocated to the maturity buckets according to the contractual terms of the corresponding derivatives. The comparable figures, effective 31 December 2018, were adjusted. Accordingly, the non-netted nominal amount of interest rate swaps used in fair value hedge accounting declined by €25,568 million in the maturity bucket up to 1 year, while it increased by €15,386 million in the maturity bucket of 1 to 5 years, and by €10,182 million in the maturity bucket of more than 5 years. This means that pbb Group strictly adheres to the contractual stipulations of the derivative instruments, whilst simultaneously streamlining the disclosure of bilateral items and financial assets netted via central counterparties.

4 Consolidation

	Fully consolidated subsidiaries		Not fully consolidated subsidiaries[2]		Associated entities and other investments		
Number of subsidiaries/ entities[1]	Total	Thereof: special purpose entities	Total	Thereof: special purpose entities	Associated entities	Other investments	**Total**
1.1.2018	**4**	**-**	**1**	**-**	**3**	**2**	**10**
Additions	1	-	-	-	-	-	**1**
Disposals	-	-	-1	-	-1	-1	**-3**
Mergers/ accruals	-1	-	-	-	-	-	**-1**
31.12.2018	**4**	**-**	**-**	**-**	**2**	**1**	**7**
1.1.2019	**4**	**-**	**-**	**-**	**2**	**1**	**7**
Additions	-	-	-	-	-	-	**-**
Disposals	-	-	-	-	-1	-	**-1**
31.12.2019	**4**	**-**	**-**	**-**	**1**	**1**	**6**

[1] pbb, subsidiaries, associated companies and other investments.
[2] Due to immateriality not fully consolidated.

A subsidiary is an entity that is controlled by another entity. Control is deemed to exist if pbb has decision-making powers to manage relevant activities, has a right to significant returns from the subsidiary, and can use its decision-making powers to influence the amount of significant variable returns.

Structured entities are entities in which voting rights or similar rights are not the dominant factors in determining control, such as if the voting rights relate merely to administrative duties and the relevant activities are governed by contractual agreements. As for subsidiaries, structured entities must be consolidated if the structured entity is controlled.

There have not been any changes in the group of consolidated companies of pbb Group in 2019.

Uniform Consolidated Accounting

The unconsolidated financial statements of the consolidated companies are incorporated in the consolidated financial statements of pbb using uniform accounting and measurement principles. Assets, liabilities, income, expenses and cash flows of the parent company and all of its subsidiaries are shown as if it is one single entity. Business relations within the group of consolidated companies are offset against each other for consolidation purposes.

Intercompany results attributable to internal transactions are eliminated.

5 Disclosures of Interests in Subsidiaries

These Consolidated Financial Statements include a list of shareholdings in the Note "Holdings of pbb" containing subsidiaries and other shareholdings. The financial year for all fully-consolidated companies is the calendar year. pbb Group does not have any subsidiaries which are not consolidated as of 31 December 2019 and 31 December 2018.

Significant Restrictions with respect to the Usability of Assets within the Group

Statutory, contractual or regulatory restrictions and protective rights of non-controlling interests may limit the Group in its ability to obtain access to the assets and to easily transfer them to respectively from another company or other companies and settle the Group's liabilities. As of the balance sheet date the Group had no significant interests over which it could not exert control in the sense of IFRS. 100% of the voting rights are retained in all the companies controlled by pbb. Consequently, there are no significant restrictions due to third-party protective rights.

6 Disclosures of Interests in Associates

There have not been significant participations in associated companies or joint arrangements retrospectively joint ventures as of 31 December 2019 and 31 December 2018. The particaptions which are immaterial from a pbb Group perspective are not included at equity in the group financial statements, but are accounted for at fair value through profit or loss (FVPL) according to IFRS 9.

In the fiscal year 2019 the participation at SANO Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Dresden KG i.L. was sold at a price of less than € 1 million and without effects on earnings. After the sale pbb Group had a participation in one associated company (31 December 2018: 2). The book value of the participation at SAMO Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Darmstadt KG, Düsseldorf, amounted to less than € 1 million € (2018: less than € 1 million). Group's interests in the profit or loss of the participation amounted to €1million (2018: €1 million).

7 Financial Instruments

According to IAS 32, a financial instrument is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Recognition and Derecognition

pbb Group recognises a financial asset or a financial liability in its statement of financial position if a Group company becomes party to the contractual provisions of the financial instrument.

The purchases or sales of financial instruments are recognised on the trading date. Premiums and discounts are recognised in accordance with the accrual concept in the position net interest income. In accordance with the primary derecognition concept of IFRS 9, a financial asset has to be derecognised if all risks and rewards have substantially been transferred. If the main risks and rewards of ownership of the transferred financial asset are neither transferred nor retained, and if control over the transferred asset is retained, the Company has to recognise the asset to the extent of its continuing involvement. There are no transactions within pbb Group which result in partial derecognition due to a continuing involvement.

In case of repos and synthetic securitisations the assets transferred do not qualify for derecognition because derecognition criteria of IFRS 9 are not met.

Collateral with the same counterparty and same conditions (e.g. ISDA master agreement) must be netted. Accordingly, only the net amount is disclosed.

Classification and Measurement of Financial Instruments

A financial asset or a financial liability shall be measured at its fair value at initial recognition plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

The amortised costs are the amount at which the financial asset or financial liability is measured at initial recognition minus the principal payments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any loss allowance.

Financial instruments at fair value are measured on the basis of stock market prices or other market prices, if existent (Level 1). If a price is not available from an active market, observable market prices from comparable financial instruments are used (Level 2). If prices from comparable financial instruments are not available, valuation models are used that are based on observable market parameters. If these parameters are not observable at the markets, the measurement of the financial assets is based on models with non-market-observable parameters (Level 3). The measurement models used are market standard models. A description of these models and the products is given in the Note “Fair Values of Financial Instruments”.

The best evidence of the fair value of a financial instrument at initial recognition is normally the transaction price, i.e. the fair value of the consideration given or received. If pbb Group determines that the fair value at initial recognition differs from the transaction price the financial instrument will be measured at fair value at initial recognition if that fair value is evidenced by a quoted price in an active market for an identical asset or liability (Level 1) or based on a valuation technique that uses only data from observable markets (Level 2). pbb Group records the difference as a gain or loss in these cases. In all other cases the difference between the fair value and the transaction price (so called day one profit) is deferred. In the financial years 2019 and 2018 there were no material day one profits.

For the purposes of subsequent measurement, financial assets must be divided into the following three categories:

- at fair value through profit or loss (FVPL)
- at fair value through other comprehensive income (FVOCI)
- at amortised cost (AC)

The categorisation of financial assets depends on the entity's business model for managing financial assets (business model criterion) and the contractual cash flow characteristics of the financial asset (contractual cash flow criterion) at initial recognition.

A financial asset shall be measured at amortised cost (AC) if both of the following conditions are met:
> the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and.
> the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

A financial asset shall be measured at fair value through other comprehensive income (FVOCI) if both of the following conditions are met:
> the financial asset is held within a business model whose objective is achieved by both collecting cash flows and selling financial assets; and
> the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

A financial asset shall be measured at fair value through profit or loss (FVPL) unless it is measured at amortised cost or at fair value through other comprehensive income. However, an entity can make an irrevocable election at initial recognition for particular investments in equity instruments that would otherwise be measured at fair value through profit or loss to present subsequent changes in fair value in other comprehensive income. pbb Group holds equity instruments of an insignificant amount. These are measured at fair value through profit or loss.

In the first step the financial assets are categorised based on business model criterion. An entity's business model is determined at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. Accordingly, this condition is not an instrument-by-instrument approach to classification and should be determined on a higher level of aggregation. For this purpose, the entity must consider all relevant evidence that is available at the date of assessment. Such relevant evidence includes, but is not limited to:
> how the performance of the business model and the financial assets held within that business model are evaluated and reported to the entity's key management personnel;
> the risks that affect the performance of the business model (and the financial assets held within that business model) and, in particular, the way in which those risks are managed;
> how managers of the business are compensated (for example, whether the compensation is based on the fair value of the assets managed or the contractual cash flows collected);
> the expected frequency, value and timing of sales in prior periods, the reasons for those sales and expectations about future sales activities.

Principally, pbb Group aggregates its financial assets for the determination of the business model criterion on the level of segments. However, deals to be syndicated form special portfolios in the segments Real Estate Finance (REF) and Public Investment (PIF). In addition, the Value Portfolio (VP) is divided in a portfolio with the intention to hold and in a portfolio with the intention to hold and sell. Furthermore, Consolidation & Adjustments contain the liquidity portfolio for which an intention to hold and sell exists in addition to portfolios with the intention to hold.

In line with IFRS 9B4.1.3A the business model may be hold to collect contractual cash flows even if the entity sells financial assets in specific situations. Such exceptions can be driven by an increased credit risk of the financial asset which amongst others pbb Group measures by the loan to value of the financing or a change to non-investment grade. Further exceptions are sales of financial assets with a short remaining maturity if the realized proceeds approximate the remaining cash flows. In addition, sales may be consistent with the business model hold to collect contractual cash flows if those sales are more than infrequent (even if significant in value) or insignificant in value either individually or aggregated (even if frequent). Amongst others, pbb Group sets the volume of sold assets in relation to the total volume of the portfolio to which the assets belong for the determination of significance.

pbb Group has to reclassify financial assets if it changes the business model for managing those financial assets. Such changes which are expected to be very infrequent are determined by the senior management as a result of externally or internally significant changes and externally demonstrable changes. Examples may be in the context of business combinations or shut downs of operations. There have not been reclassifications of financial assets in the years 2019 and 2018.

In the second step of the categorisation an entity has to classify a financial asset on the basis of the contractual cash flow characteristics (contractual cash flow criterion). For this, an entity shall assess whether contractual cash flows are solely payments of principal and interest on the principal amount outstanding. The principal is the fair value of the financial asset at initial recognition. Interest consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks (for example, liquidity risk) and costs, as well as a profit margin. When assessing the contractual cash flows pbb Group also considers derivatives embedded in a host contract. For example, if leverage increases the volatility of the contractual cash flows the contractual cash flow criterion will not be fulfilled. Furthermore, for financings of structured entities without the right ofrecourse on specific assets of the borrower or payments from these assets has to be assessed whether pbb Group has primarily a loan risk or an investment risk. If there is primarily an investment risk but not primarily a loan risk the contractual cash flow criterion will not be fulfilled. pbb Group assesses this distinction on the basis of the loan to value at the date of the initial recognition of the financial asset.

An entity may, at initial recognition, irrevocably designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the resulting gains and losses on different bases (so called fair value option). pbb Group does not use the fair value option for financial assets.

Non derivative financial liabilities have to be measured at amortised cost, unless they are hold for trading purposes or are designated at fair value through profit or loss. As of 31 December 2019 and 31 December 2018 pbb Group has not issued compound financial instruments with multiple embedded derivatives.

The amount of change in the fair value of financial liabilities designated at fair value through profit or loss (fair value option) that is attributable to changes in credit risk of that liability shall be presented in other comprehensive income and the remaining amount of change in profit or loss. pbb Group does not have non-derivative financial liabilities measured at fair value through profit or loss and does not use the fair value option for financial liabilities. Derivatives have to be measured at fair value through profit or loss unless they are used as hedging instruments in the scope of cash flow hedge accounting.

According to IFRS 9 the non-derivative financial instruments of pbb Group are aggregated, classified and measured as follows:

- Segment Real Estate Finance (REF): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). The exceptions are:
  - Financial assets or parts of financial assets, for which there is an intention to syndicate (business model: financial asset is neither held within a business model whose objective is to hold financial assets in order to collect contractual cash flows nor within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets). These have to be accounted for at fair value through profit or loss.
  - Financial assets which do not fulfill the contractual cash flow criterion and therefore have to be measured at fair value through profit or loss.
- Segment Public Investment Finance (PIF): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). Exceptions are: Financial assets or parts of financial assets, for which there is an intention to syndicate (business model: financial asset is neither held within a business model whose objective is to hold financial assets in order to collect contractual cash flows nor within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets). These have to be accounted for at fair value through profit or loss.
- Segment Value Portfolio (VP): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). Exceptions are:
  - Financial assets or parts of financial assets held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. These are measured at fair value through other comprehensive income.
  - Financial assets which do not fulfill the contractual cash flow criterion and therefore have to be measured at fair value through profit or loss.
- Portfolios in Consolidation and Adjustments (C&A): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). Exceptions are:
  - Financial assets held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. These financial assets of the liquidity portfolio are measured at fair value through other comprehensive income.

The European Market Infrastructure Regulation (EMIR) imposes a clearing obligation for standardised Over-The-Counter (OTC) derivatives. pbb uses Eurex Clearing as central clearing agent for derivatives. For Eurex cleared transactions, pbb applies on-balance sheet netting. On-balance sheet netting is applied for each currency, and comprises the carrying amounts of the derivatives as well as the margins calculated (and collected or credited) by Eurex Clearing. The net book values are disclosed under “positive fair values of hedge accounting derivatives” or “negative fair values of hedge accounting derivatives”.

In alignment with the customer the contractual cash flows of a financial instrument in the existing business may be renegotiated or otherwise modified. Such changes made to existing terms of a contractual relationship during the contract term are called modifications. Modifications may be market-driven commercial renegotiations or can be performed to avoid larger credit defaults. It is necessary to check whether the modification is significant or insignificant.

Significant modifications are substantial to the extent that they, in essence, constitute a new financial instrument. The modification can be significant due to qualitative (for example change of counterparty or of currency) or due to quantitative reasons. In case of significant modifications the old financial instrument has to be derecognized and a modified new financial asset has to be recognized as a new asset.

In case of insignificant modifications the agreed amendments to the contractual cash flows have to be discounted and the difference between the present value of the modified contractual payments determined in this way and the carrying amount (present value of the contractual payments before modification) are recognized through profit or loss. In the years 2019 and 2018 the effects from insignificant modifications were not material.

Loans at risk of default are restructured by pbb Group if the borrower's financial position has deteriorated but a positive going-concern forecast for the loan exposure can still be expected. This is carried out by changing the underlying terms and conditions or side agreements by means of a unilateral or mutual declaration of intent. Restructuring agreements should maximise opportunities for pbb Group to realise its outstanding loans or at least minimise the risk of default of the loan exposure. These generally include inter alia standstill agreements, maturity extensions, changed interest payment/repayment terms, interest/repayment reductions or the suspension of contractual agreements (e.g. financial covenants) so that the borrower is again able to meet their payment obligations. The credit risk associated with restructured loans is managed by the Group's Credit Risk Management units. The methods used to measure and manage risk are presented in the section of the Risk and Opportunity Report entitled "Credit Risk". Further information is provided in the Note "Restructured Loans and Advances".

Impairment

The regulations regarding impairments in accordance with IFRS 9 are relevant for assets measured either at "amortised cost" or at "fair value through other comprehensive income" as well as for off-balance sheet obligations, such as loan commitments and financial guarantees. The rules do not have to be applied for equity instruments. An impairment is implied for financial assets measured at fair value through profit or loss at subsequent measurement. For derivatives measured at fair value through profit or loss the maximum risk of default is reflected in the nominal value, whereas for non-derivative financial instruments measured at fair value through profit or loss it is reflected in the book value. IFRS 9 contains a model according to which provisions for credit losses may be created upon initial recognition of the financial asset (or on the date when the Group becomes a contracting party of the loan commitment or financial guarantee) on the basis of credit losses expected at that time. According to IFRS 9 this is an unbiased and probability-weighted amount that is determined by evaluation of a range of possible outcomes and scenarios. IFRS 9 clarifies that this is a probability weighted average and not the most probable amount.

Upon initial recognition, the impairments in lending business are based on expected credit losses within the following twelve months (so-called stage 1). The 12-months expected credit loss is part of the lifetime expected credit losses and corresponds to the expected credit losses from defaults that may occur for the financial instrument within twelve months after balance sheet date. In case of a significant increase in the financial asset's credit risk within the context of subsequent measurement (stage 2) or in case of a credit impairment (stage 3), the impairment has to reflect the lifetime expected credit losses. pbb Group does not apply the simplified approach for loans from lease agreements but also differentiates these into the impairment stage 1 and 2.

The same definition of default is used for IFRS 9 as for regulatory purposes. For this a default is defined if

> it is unlikely that the borrower can fully fulfil its payment obligations, or
> the borrower has material past dues of more than 90 days.

pbb Group determines the expected credit losses on an individual basis.

pbb Group developed check criteria for the allocation to the three impairment stages of IFRS 9 which is very closely linked to the methods and instruments for credit and risk monitoring. In addition, the practice of credit risk management leads to an intensification of supervision with increasing impairment stage. Each financial asset which does not have to be measured at fair value through profit or loss has to be allocated to stage 1 at initial recognition if it is not credit-impaired. A financial asset moves to stage 2 if the credit risk has increased significantly but is not credit-impaired. This is the case if

> as rebuttable presumption there is a past due of more than 30 days; or
> the financial asset is non-investment grade and the multi-year probability of default at balance sheet date exceeds the multi-year probability of default at initial recognition of the financial asset by a factor of at least 2.5.

The criterion of 30 days past due can be rebutted for example in the case of so called technical past dues. This can be the case if the borrower transfers the amount owed to a wrong account and corrects this at short notice.

Counterparties of loans and securities which credit has deteriorated compared with the date of initial recognition but which still have an investment grade rating and which do not have a payment past due of more than 30 days are assessed as very low-risk in the allocation to the impairment stages.

If the credit risk of a financial assets with a significantly increased credit risk has not significantly increased any further at balance sheet date compared to the date of initial recognition the financial asset will move back to stage 1.

A financial asset will have to be moved to stage 3 if it is credit-impaired. A deal will be credit-impaired if one or more events that have detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include observable data about the following events:

> significant financial difficulty of the issuer or the borrower;
> a breach of contract, such as a default or past due event;
> pbb Group, for economic reasons or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower concessions that pbb Group would not otherwise consider;
> it is becoming probable that the borrower will enter bankruptcy or other financial reorganization;
> the disappearance of an active market for that financial asset because of financial difficulties;
> the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

For purchased or originated credit-impaired financial assets (POCI) only the cumulative changes in lifetime expected credit losses since initial recognition have to be recognised as a loss allowance at balance sheet date. For such financial assets expected credit losses shall be discounted using the credit-adjusted effective interest rate determined at initial recognition. The credit-adjusted effective interest rate has to be applied to the amortised cost from initial recognition. The recognition of interest income will have to be determined this way for the entire maturity also if the borrower recovers. The interest income is attributed to the POCI-asset, received repayments have to be recognised as repayments. pbb Group did not purchase or originate credit-impaired financial assets as of 31 December 2019 and as of 31 December 2018.

pbb Group principally uses a model-based approach for determining the amount of expected credit losses. Regulatory risk parameters (probability of default/PD, loss given default/LGD) and contract information, for example the contractually agreed cash flows, are used as a basis for determining the amount of credit losses of the stage 1 and stage 2 financial instruments. The exposure size results from the comparison of the contractually agreed cash flows and the expected cash flows. The risk parameters listed above are linked to the exposure size to determine the expected losses. In addition expectations about prepayments (so called prepayment rates), expected prolongations of loans (so called prolongation rates) and expected drawings of undrawn parts of a commitment (so called credit conversion factor/CCF) are considered in the expected cash flows. The risk parameter PD is determined for each borrower with the aid of customer specific rating methods. Several customer specific risk factor for example the debt ratio, return indicators and similar quantitative indicators are input factors of the rating methods. The risk parameter LGD is determined with the aid of specific LGD models in which especially expected recovery ratios from the disposal of collaterals or other parts of the asset, the transaction specific ratio of current collaterals and the current book value of the loan as well as the expected time till receipt of payments are material input factors. These PD rating methods and LGD models are also methods which pbb Group uses as a standard approach for risk assessment and risk controlling. The regulatory risk parameters are transformed adequately so that the requirements of IFRS 9 are fulfilled. These include the deduction of conservative adjustments which are used for regulatory purposes, the consideration of macro-economic factors for the purpose of the so called point in time transformation and the transition from the regulatory discount rate to the effective interest rate required by IFRS 9. Particularly the transformations ensure that the risk parameters are unbiased. Historic data about rating migration together with forecasts of macro-economic developments (for example the economic growth per country and – for real estate financings – the development of collateral market values differentiated by object types and regions) are used for the determination of multi-year probabilities of default. For this information according to the type of customer are used. pbb Group forecasts relevant indicators for example market value developments or the economic growth on the basis of internal analyses and externally available data. Possible non-linearity effects are considered in the determination of the expected credit loss. The interest income is calculated by applying the effective interest rate to the gross book value (book value before risk provision) of the financial asset.

pbb Group uses forecasts of the gross domestic product (GDP) of the International Monetary Fund (IMF) for the determination of point in time probabilities of default. For deals of the impairment stage 1 only the GDP for the year 2020 is used. The IMF forecasts until the year 2024 are used for deals of the impairment stage 2. Starting from the year 2025 a convergence to the long-term GDP average is modelled.

The expected credit losses of impairment stage 3 are determined on the basis of individual cash flows with several probability-weighted scenarios. The amount of risk provision equals the difference between the carrying amount of the asset and the present value of the expected future cash flows. The latter is calculated on the basis of the initial effective interest rate. The expected future cash flows take into account the marketability of collaterals for example charges on the land/mortgages. The interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset.

A financial asset has to be written-off by using the existing booked impairment if a recovery is not feasible based on adequate judgement. This is generally the case if in the process of a realization of the collateral a residual claim remains and if it is foreseeable that no further amounts are expected from the borrower (for example due to insolvency/lack of funds). pbb groups attempts to collect the remaining claim completely or at least partly by enforcement activities for written-off loans in justified exceptions.

Hedge Accounting
As long as regulations on accounting for macro hedges have not yet been adopted, the IASB provides the possibility by an option to apply the former rules pursuant to IAS 39. For hedge accounting pbb Group exercised the accounting option and retains the current regulation of IAS 39. The accounting of hedge relationships is shown in the section "Notes to Derivative Transactions and Hedged Items".

Disclosure/Notes
IFRS 7 (Financial Instruments: Disclosures and IFRS 13 (Fair Value Measurement) required disclosures according to classes of financial instruments. pbb Group mainly defined the measurement categories according to IFRS 9– sub divided in the products loans and advances and debt securities as well as liabilities to other banks, liabilities to customers, bearer bonds and subordinated liabilities – irrevocable loan commitments, financial guarantees, hedging derivatives and cash reserve as well as claims from finance lease agreements.

Specific disclosures required by IFRS 7 are shown in the risk and opportunity report for example about credit risk, market risk and liquidity risk.

8 Leases

According to IFRS 16, a lease is a contract that conveys the right to use an asset for a period of time in exchange for consideration.

pbb Group as a Lessor
Upon initial recognition of a lease, lessees recognise a lease liability as well as a right-of-use asset. The lease liability is discounted using the present value of future lease payments; simultaneously, lessees recognise a right-of-use asset in the amount of the discounted lease liability. Usually, right-of-use assets depreciate on a straight-line basis over the projected term of the lease. All payment obligations of the lessee resulting from leases are subsequently measured at amortised cost using the effective interest method.

pbb Group discloses right-of-use assets in ‘tangible assets’, while lease liabilities are disclosed under ‘other liabilities’. Depreciation of right-of-use assets is recognised in the note on ‘net gains and losses from write-downs and write-ups of non-financial assets’. Interest expenses resulting from lease liabilities are disclosed in ‘net interest income’.

pbb Group as a Lessee
As a lessor, pbb Group has entered into finance leases only. Regarding finance leases, substantially all risks and rewards incidental to ownership of the leased asset are transferred to the lessee. The lessor recognises receivables in the amount of the net investment value. Lease payments received are divided into an interest portion, which is recognised through profit or loss, and a principal portion.

pbb Group discloses loans and advances from finance leases under ‘loans and advances to customers’, which are disclosed within financial assets at amortised cost. Interest income from finance leases is disclosed in ‘net interest income’.

In the 2018 financial year, pbb Group recognised leases according to IAS 17 Leases. According to IAS 17, a lease was defined as an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leases were classified as finance leases or operating leases in line with IAS 17. A lease was classified as an operating lease if substantially all the risks and rewards incidental to ownership of the leased asset remained with the lessor. In contract, a lease was classified as a finance lease if substantially all risks and rewards incidental to ownership were transferred to the lessee.

Under IAS 17, only finance leases were relevant to pbb Group in its role as a lessor, while only operating leases were relevant to the Group in its role as a lessee. Regarding finance leases, pbb Group, in its role as a lessor, recognised receivables from the lessee. The received lease payments were divided into an interest portion and a principal portion. The lease instalments paid by pbb Group in its role as a lessee, in the context of operating leases, were recognised as an expense over the lease term and disclosed as other operating expenses, or administrative expenses if the payments referred to rental expenses. However, pbb Group did not recognise any leased assets in the context of operating leases, which was in line with IAS 17.

9 Cash Reserve

Cash reserve contains balances with central banks which are measured at cost.

10 Financial Assets at Fair Value through Profit or Loss

The financial assets at fair value through profit or loss consist of positive fair values of stand-alone derivatives and the following non-derivative financial assets:

- Loans and advances, debt securities, shares in investment funds and in entities which are not measured at-equity due to their immateriality which do not fulfil the contractual cash flow criterion.
- Parts of financial assets, for which there is an intention to syndicate.

Financial assets of this balance sheet position are measured at fair value. Changes of the fair value within a period affect profit or loss in the line item net income from fair value measurement of the income statement. The payments and amortisation of interests from this position are shown in net interest income.

11 Financial Assets at Fair Value through Other Comprehensive Income

The position financial assets at fair value through other comprehensive income consists of loans and advances as well as securities of the measurement category at fair value through other comprehensive income. These are non-derivative financial assets which fulfil the contractual cash flow criterion of IFRS 9 and which are held within a business model whose objective is achieved by both collecting cash flows and selling financial assets. Parts of the debt securities and loans and advances of the Value Portfolio and Consolidation & Adjustment fulfil these criteria at pbb Group.

Financial assets of this balance sheet position are measured at fair value. Changes of the fair value within a period are shown in accumulated other comprehensive income of equity without affecting profit or loss. The payments and amortisation of interests from these positions are shown in net interest income. Impairments of all three stages according to IFRS 9 are shown in net income from risk provisioning of the income statement and in accumulated other comprehensive income in the statement of financial position. Gains or losses from derecognition of financial assets measured at fair value through other comprehensive income are shown in net income from realisations.

12 Financial Assets at Amortised Cost after Credit Loss Allowances

The position financial assets at amortised cost after credit loss allowances contains loans and advances as well as securities of the measurement category at amortised cost. These are non-derivative financial assets which fulfil the contractual cash flow criterion of IFRS 9 and which are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows. Debt securities and loans and advances of the segments Real Estate Finance, Public Investment Finance and parts of the Value Portfolio and of Consolidation & Adjustments fulfil these criteria at pbb Group.

Financial assets of this balance sheet position are measured at amortised cost. Interest income and expenses from this position is shown in net interest income. Impairments of all three stages according to IFRS 9 are shown in net income from risk provisioning of income statement. The assets are shown before and after impairments in the income of financial position. Gains or losses from derecognition of financial assets measured at fair value through other comprehensive income are shown in net income from realisations.

13 Positive Fair Values of Hedge Accounting Derivatives

The position positive fair values of hedge accounting derivatives contains the fair value of derivatives which are subject to hedge accounting and which are positive. As pbb Group does not designate derivatives in cash flow hedge accounting anymore the position only includes derivatives of the micro fair value hedge accounting and of the portfolio hedge of interest rate risks. These derivatives are measured at fair value. Changes of the fair value within a period affect profit or loss and are disclosed in the position net income from hedge accounting in the income statement. The interest payments and amortisations of these positions are shown in net interest income.

14 Valuation Adjustment from Portfolio Hedge Accounting (Assets)

The position valuation adjustment form portfolio hedge accounting (assets) contains the fair values subject to the hedged risks in the hedged cash flows of the portfolios of hedged items on the asset side. In the context of portfolio hedge accounting interest rate risks from loans and advances as well as from liabilities are hedged on a portfolio basis.

15 Tangible Assets

Tangible assets are generally measured at cost of purchase or cost of production. The carrying amounts (except land) are depreciated on a straight-line basis in accordance with the expected useful lives of the assets. In addition, tangible assets are tested at least annually for impairment. If the value of tangible assets has impaired, an impairment loss is recognised in profit or loss. If the reasons for the impairment no longer exist, an amount not exceeding amortised cost or cost of production is reversed through profit or loss. For fixtures in rental buildings calculations are based on the term of the contract, taking into account any extensions options if this term is shorter than the normal useful economic life.

The normal useful economic life amounts to:
- Fixture in rental buildings: 5-15 years.
- IT equipment (broad sense): 3-5 years.
- Other operating equipment: 3-25 years.

Subsequent cost of purchase or costs of conversion are capitalised if an additional economic benefit is generated for the Company. Maintenance expenses of tangible assets are recognised in profit or loss of the financial year in which they arose.

Right-of-use assets from leasing are disclosed in "tangible assets". The accounting of the right-of-assets is described in the note "leases".

16 Intangible Assets

Purchased and internally generated software are the main items recognised as intangible assets. Goodwill, brand names and customer relations are not capitalised.

Software is an intangible asset with a finite useful life. Purchased software is measured at the amortised purchase cost. pbb Group capitalises internally generated software if it is probable that future economic benefits is generated for the Group and the expenses can be measured reliably. Expenses eligible for the capitalisation of internally generated software include external, directly attributable costs of materials and services as well as personnel expenses for employees directly associated with the creation of software used by the Company. Software is amortised on a straight-line basis over expected useful lives of three to five years. In addition, intangible assets with a finite useful life are tested for impairment annually or whenever there is an indication that the intangible asset may be impaired or its useful life has reduced.

17 Other Assets

Other assets mainly comprise the collaterals pledged for the banking levy. The collaterals are accounted for at amortised cost.

18 Financial Liabilities at Fair Value through Profit or Loss

The financial liabilities at fair value through profit or loss contain the negative fair values of stand-alone derivatives. Financial liabilities of this balance sheet position are measured at fair value. Changes of the fair value within a period affect profit or loss in the line item net income from fair value measurement of the income statement. The payments and amortisation of interests from this position are shown in net interest income.

19 Financial Liabilities at Amortised Cost

The position financial liabilities at amortised cost consists of all non-derivative financial liabilities. Financial liabilities of this balance sheet position are measured at amortised cost. Interest income and expenses from this position is shown in net interest income. Gains or losses from derecognition of financial liabilities measured at amortised cost are shown in net income from realisations. Such derecognitions may result from prepayments of borrowers.

Amongst others the position financial liabilities at amortised cost contains subordinated liabilities. In the event of insolvency or liquidation subordinated liabilities may only be repaid after all non-subordinated creditors have been satisfied. For some instruments of subordinated liabilities the holders participate in any net loss or unappropriate retained earnings. In addition, the interest entitlement can be ceased or reduced under specific conditions. For other instruments the interest payment ceases only in case of a net loss respectively unappropriate retained earnings which can be recovered depending on the structuring.

Pursuant to IAS 32 the subordinated capital instruments issued by companies of pbb Group were classified as financial liabilities or equity instruments in accordance with the substance of the contractual arrangement and the definitions of a financial liability and an equity instrument.

20 Negative Fair Values of Hedge Accounting Derivatives

The position negative fair values of hedge accounting derivatives contains the fair value of derivatives which are subject to hedge accounting and which are negative. As pbb Group does not designate derivatives in cash flow hedge accounting anymore the position only includes derivatives of the micro fair value hedge accounting and of the portfolio hedge of interest rate risks. These derivatives are measured at fair value. Changes of the fair value within a period affect profit or loss and are disclosed in the position net income from hedge accounting in the income statement. The interest payments and amortisations of these positions are shown in net interest income.

21 Valuation Adjustment from Portfolio Hedge Accounting (Liabilities)

The position valuation adjustment form portfolio hedge accounting (liabilities) contains the fair values subject to the hedged risks in the hedged cash flows of the portfolios of hedged items of the liability side. In the context of portfolio hedge accounting interest rate risks from loans and advances as well as from liabilities are hedged on a portfolio basis.

22 Provisions

A provision is a liability of uncertain timing or amount. A provision shall be recognised when an entity has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. According to IAS 37.15 in rare cases it is not clear whether there is a present obligation. In these cases a past event is deemed to give rise to a present obligation if, taking into account of all available evidence, it is more likely than not that a present obligation exists at the end of the reporting period. In rare cases, for example in a law suit, it may be disputed whether certain events have occurred or whether those events result in a present obligation. In such a case, pbb determines whether a present obligation exists at the end of the reporting period by taking into account all available evidence, including, for example, the opinion of experts.

Under IAS 37.36 et seq., the best estimate is used for measuring provisions for contingent liabilities and contingent losses attributable to pending transactions. Long-term provisions are generally discounted with an interest rate that reflects the current assessments of the time value of money and the risks specific to the liability.

Provisions for commitments and guarantees given are booked on the basis of impairment rules of IFRS 9 and disclosed under provisions.

Provisions for defined benefit plans are calculated on the basis of actuarial reports in accordance with IAS 19. They are measured using the projected unit credit method. The amount of the provision equals the so-called net defined benefit liability which is the difference between the present value of the defined benefit obligation and the fair value of plan assets. pbb has concluded plan assets in the form of a qualifying insurance policy to hedge parts of the risk from the defined benefit obligations. The reinsurance is pledged to the plan beneficiaries.

The determination of the net defined benefit liability is based on demographic and financial actuarial assumptions. A demographic assumption for example is the mortality for which pbb uses guidance tables. For financial actuarial assumptions the discount rate has the greatest effect on the amount of defined benefit liability. The interest rate used for the measurement is determined by reference to market yields at the end of the reporting period on high-quality, fixed-interest corporate bonds.

Net interest on the defined benefit liability is determined by multiplying the defined benefit liability with the discount rate. The determination is done at the beginning of the financial year taking into account any changes in the net defined benefit liability as a result of contribution and benefit payments during the period. Net interest on defined benefit liability are shown together with all other effects on income statement from the defined benefit obligations and the plan assets in the position pension expenses and related employee benefit costs in general and administrative expenses.

Remeasurements of the net defined benefit liability result from actuarial gains and losses and the return on plan assets excluding amounts included in net interest on the net defined benefit liability. Remeasurements of the net defined benefit liability are shown in equity in the position profit/losses from pension obligations. Changes of remeasurements of the net defined benefit liability within a period are shown as a component of the statement of comprehensive income. Actuarial gains and losses result from increases or decreases in the present value of the defined benefit obligation due to changes of actuarial assumptions and experience adjustments. Changes of the discount rate usually have the biggest effect on the actuarial gains and losses.

Along with other German financial institutions, pbb Group is a member of the pension fund BVV Versorgungskasse des Bankgewerbes e.V. ("BVV"). Both pbb Group as an employer and the eligible employees make regular contributions to the BVV pension schemes. BVV insurance tariffs are calculated and designed to provide fixed pension payments, plus profit participations. Every BVV member entity has a subsidiary responsibility for the pension claims of its eligible employees. pbb Group classifies the BVV pension scheme as a defined benefit plan, but discloses it as a defined contribution plan for accounting purposes because the information available is not sufficient to recognise it as a defined benefit plan. pbb Group considers the risk of becoming liable to pension obligations due to its subsidiary responsibility as very remote, and does not recognise any provisions in this respect.

23 Other Liabilities

Accruals are one position in other liabilities. This also includes short-term liabilities to employees, for instance flexitime credits and vacation entitlements. The accrued liabilities are recognised at the amount likely to be utilised. If the obligations listed at this note cannot be quantified precisely on the balance sheet date and if the criteria specified in IAS 37 for recognising provisions are satisfied, these items have to be disclosed as provisions. Leasing liabilities are a further position in Other Liabilities whose accounting is described in the note "leases".

24 Equity

The equity includes the equity attributable to the shareholders and the additional equity instruments (AT1 capital). The equity attributable to the shareholders consists of the subscribed capital, additional paid-in capital, retained earnings, consolidated profit and accumulated other comprehensive income. The accumulated other comprehensive income contains the reserves for remeasurements of defined benefit commitments (gains/losses from pension obligations), for cash flow hedge accounting and for financial assets at fair value through other comprehensive income (FVOCI).

The AT1 capital is classified as equity since there is neither an obligation to repay the capital nor is there an obligation for ongoing debt service. The transaction costs directly attributable to the issue of the AT 1 capital and paid coupons are deducted directly from equity.

25 Share-based Payment

pbb Group has awarded share-based remuneration with cash settlement to board members and specific staff members since the financial year 2016. According to the conditions of the remuneration system the variable compensation is economically affected by the price development of the pbb share in the scope of the sustainability component. The payment structure is split into a payment part and a so called deferral part which is supposed to establish a multi-year basis of assessment and to orientate the variable component of these persons to the long term success of the company. The period of deferment for the deferral part amounts to three respectively five years depending on the agreements. The concept of the share based remuneration system is described in detail in the remuneration report. The extent of the share-based payments is disclosed in the note "related parties disclosures".

26 Currency Translation

Currency translation is carried out in accordance with the regulations of IAS 21. On the balance sheet date, monetary items in a foreign currency are translated into the functional currency. The reporting currency is Euro. Non-monetary items which were stated in a foreign currency using historical cost of purchase are measured using the exchange rate applicable at date of purchase.

Income and expenses attributable to currency translation are generally recognised in profit or loss in net other operating income/expenses.

All entities of the Group have Euro as the functional currency. Therefore, the group of consolidated companies does not include any companies from hyperinflationary countries.

27 Income Taxes

Income taxes are accounted for and measured pursuant to IAS 12 and according to IFRIC 23.. Apart from the exceptions defined in the standard, deferred taxes are calculated for all temporary differences between the IFRS values and the tax values as well as for the differences resulting from uniform Group measurement principles and differences from the consolidation (balance sheet method). Deferred tax assets arising from non-utilised losses carried forward, interest assets carried forward and tax credits are recognised if required in accordance with IAS 12.34 et seq.

Deferred taxes are calculated using the national tax rates which are expected at the time the differences are settled, as the concept of deferred taxes is based on the presentation of future tax assets or tax liabilities (liability method). Changes in tax rates have been taken into account.

If it is unlikely that the amounts disclosed in pbb's tax declarations will be realised (uncertain tax positions), tax liabilities are recognised. The liability amount is derived as being the best possible estimate of the expected tax payment (expected amount or most likely amount of tax uncertainty). Tax claims from uncertain tax positions are recognised if they will likely be realised. If pbb identifies any tax loss carryforwards or unused tax credits, pbb recognises appropriate tax liabilities or tax claims; additionally, pbb recognises deferred tax assets in the amount of the unused tax loss carryforwards or tax credits for these uncertain tax positions.

28 Non-current Assets Held for Sale

In accordance with IFRS 5, a non-current asset or disposal group must be classified as held for sale if the related carrying amount is primarily realised by a disposal transaction and not by continued use. To reclassify an asset as held for sale, certain conditions must be met on a cumulative basis. Above all, there must be a specific intention to sell, the asset must be immediately available and the disposal must be highly probable. As at 31 December 2019 and at 31 December 2018 pbb Group did not own any assets held for sale.

29 Judgements and estimations

When preparing the financial statements, pbb Group makes future-related judgements as well as estimations, which may carry a considerable risk of a major change to the disclosed assets and liabilities becoming necessary during the next financial year. The assumptions and parameters underlying the estimates to be made are based on the exercise of appropriate judgement.

Going-Concern
The Consolidated Financial Statements of pbb are based on the judgement of going-concern. The conditions of going-concern are described in the report on expected developments.

Classification of Financial Instruments
For measurement purposes the financial assets have to be classified into the three measurement categories at fair value through profit or loss, at fair value through other comprehensive income and at amortised cost. The classification depends amongst others on the contractual cash flow criterion. The assessment of this criterion is based on judgements which are described in the note "Financial Instruments". For example, this relates to the judgement of the contractual regulation for the financial assets.

Allowances
pbb shall recognise a loss allowance for expected credit losses on a financial asset that is measured at amortised cost or at fair value through other comprehensive income, a lease receivable or specific loan commitments and financial guarantee contracts. For this reasonable and supportable information, including forward-looking information, have to be taken into account.

Expected credit losses are a probability-weighted estimate of credit losses, i.e. the present value of expected cash shortfalls, over the life of the financial instrument. A cash shortfall is the difference between the cash flows that are due to an entity in accordance with the contract and the cash flows that entity is expected to receive. Upon initial recognition, the impairments in lending business are based on expected credit losses for twelve months (so-called stage 1). The 12-month expected credit loss is that part of the lifetime expected credit losses, which is equal to the expected credit losses from defaults that may occur for the financial instrument within twelve months after balance sheet date. In case of a significant increase in the financial asset's credit risk within the context of subsequent measurement (stage 2) or in case of a credit impairment (stage 3), the impairment has to reflect the expected default events over the life of the transaction (lifetime expected credit loss).

The methods and judgements, including forward-looking information, for the determination of a change of an impairment stage and estimation of the amount of impairment are reviewed at least annually.

According to IAS 8.34, an accounting estimate may need revision if changes occur in the circumstances on which the estimate was based on or as a result of new information or more experience. The determination of impairments on financial instruments is based on accounting estimates. In this context, an expected credit loss must be determined as an unbiased and probability-weighted amount, taking into account scenarios. Information on past events, current conditions and forecasts of future economic developments are taken into account. Past data must be adjusted if current information or future expectations are not reflected in the historical data.

In the fourth quarter of 2019, pbb Group made two accounting-related changes to estimates in the determination of impairments for non-credit-impaired financial instruments. On the one hand, pbb Group weighted the scenario of an economic downturn and declining real estate market values compared to the previous year with a higher probability of occurrence in order to determine the expected credit loss for impairment levels 1 and 2, due to the deterioration in the macroeconomic and sector-specific forecasts and the increasing global risks, which led to an increase in the impairments of € 20 million. On the other hand, pbb Group has expanded its loss database on the basis of the amended regulatory definition of default, taking into account, inter alia, a longer time history. Among other things, the additional data resulted in an adjustment (recalibration) of the models used to determine the probability of default (PD) and the loss given default (LGD). After adjustment to meet the IFRS 9 requirement, the regulatory parameters influence the expected credit loss, which resulted in an increase in allowances of € 11 million. The two changes in accounting estimates resulted in loan loss provisions of € 31 million.

Fair Values of Original and Derivative Financial Instruments
The fair value of financial instruments that are not listed on active markets is measured using valuation models. In such cases, a check is performed regularly to assess whether the valuation models provide a comparable benchmark for current market prices. The valuation models can only take into account quantifiable factors (e.g. cash flows and discount rates) that also require estimates. Changes in estimations of these factors might have an impact on the fair values of the financial instruments.

According to IAS 8.34, an accounting estimate may need revision if changes occur in the circumstances on which the estimate was based or as a result of new information or more experience. In 2019, pbb Group made the following changes in accounting estimates regarding fair value determinations:

> At the beginning of the second quarter of 2019, pbb Group adjusted the estimate assumptions used for the fair value measurement of real estate receivables (adjusting contractual interest rate floors). This resulted in an increase in the fair values of loans and advances totalling €33 million disclosed in the note "fair values of financial instruments". This change in accounting estimates had no effect on the income statement or the statement of financial position of pbb Group.

> Effective 30 June 2019, after carrying out a review of the fair value measurement of liabilities to customers in the deposit business, pbb Group no longer used the measurement curve for secured instruments, but for senior preferred instruments. This change in estimate led to a decline in the fair value of liabilities to customers in the amount of €24 million shown in the note "fair values of financial instruments". This change in accounting estimates had no effect on the income statement or the statement of financial position of pbb Group.

> In the fourth quarter of 2019, pbb Group expanded the measurement of financial assets and liabilities to include premiums and discounts which are usually payable upon disposal of financial instruments (close-out costs) as well as costs from price uncertainties, for instance in illiquid markets. This means that pbb Group now includes deviations from the mid-price as an additional measurement component regarding the hypothetical disposal of financial instruments. This change in accounting-related estimates was made in line with market developments and resulted in the following effects: (a) expenses of €2 million recognised through profit or loss, disclosed in net income from fair value measurement; (b) decline of €1 million in accumulated other comprehensive income, recognised in equity, due to financial assets measured at fair value through other comprehensive income; (c) decline of €88 million in fair values disclosed in the note "Fair Values of Financial Instruments".

> When measuring receivables, pbb Group by default takes imputed funding costs into account, as part of the margin. The calculation of funding costs is based, amongst other factors, on the yield curve for Public-Sector Pfandbriefe. However, from pbb Group's perspective, there is no valid market data available for terms of more than 15 years. Against this background, starting from the 2019 financial year, pbb Group uses the slope of the Mortgage Pfandbriefe yield curve for this purpose. This change in accounting-related estimates was made in the fourth quarter of 2019 and had no effects on pbb Group's income statement or statement of financial position. However, this change in estimates led to a decline of €15 million in fair values recognised for financial assets in the measurement category "at amortised cost" in line with IAS 8.34.

Hedge Accounting
Relations between hedged items and hedging instruments can be presented in hedge accounting. A relationship only qualifies for hedge accounting when certain conditions specified under IAS 39.88 are satisfied. Amongst others the hedge has to be very efficient with regard to achieving compensation for the risks resulting from changes in the fair value or the cash flow in relation to the hedged risk.

The determination of the effectiveness of the risk hedge depends on risk measuring methods, the parameters which are used and estimations relating to the probability of occurrence. These methods and parameters are continuously developed in line with the risk management objectives and strategies.

Intangible Assets, Tangible Assets including Right-of-Use assets from Leases
pbb Group's accounting for intangible assets and tangible assets including right-of-use assets from leases are subject to estimation uncertainties, particularly in the determination of the useful life of assets respecitively the expected contractual period of the lease and the associated amount of depreciation/amortisation recognised per period.

Provisions
Estimates are used in the measurement of provisions at pbb Group. Estimation uncertainties arise in particular during assessment of the amount of the future cash outflows, the time horizon and the discount rate.

Income Taxes
pbb Group is subject to a wide range of national tax regulations with regard to the calculation of income taxes. In order to measure the tax expenses, it is necessary to make estimates that are calculated with the existing knowledge as of the balance sheet date and closely related to the tax return prepared in the following financial year. In some countries, the current tax charges attributable to the current financial year can only be definitely finalised after the corresponding tax audit has been completed. The variances with regard to the estimated tax burden may have a positive or negative influence on the tax burden in future financial years.

With regard to the capitalisation of losses carried forward and other tax credits, the extent as well as the actual availability of such tax benefits are subject to estimation. Major losses carried forward are subject to national German tax law, and their availability depends inter alia on the restrictions set out in Sections 10 d EStG, 8 c KStG as well as Section 10 a GewStG restrictions. Deferred tax assets arising from losses carried forward are therefore recognised to the extent as it is likely that future taxable income will be available to offset the non-utilised tax losses carried forward.

Consolidation
Companies and structured entities must be consolidated if pbb has direct or indirect control over them. Control is deemed to exist if pbb has decision-making powers to manage relevant activities, has a right to significant returns from the subsidiary and can use its decision-making powers to influence the amount of the significant variable returns. The level of control is assessed on the basis of contractual and economic relationships to the company or the structured entity. The assessment whether pbb exerts control or substantial influence over the company may result in judgement leeway.

30 Notes to segment reporting by operating segment

Segment reporting for the 2019 financial year was prepared in accordance with IFRS 8 Operating Segments. In line with the Management Approach under IFRS 8, segment reporting discloses segment-specific, management-relevant financial information that is also regularly used by Management Board (Chief Operating Decision Maker) when deciding on the allocation of resources, and for assessing the earnings power of segments. Based on the organisational structure of pbb Group, which is aligned to the various products and services offered, three business segments have been determined in line with internal management reporting.

Within segment reporting, income is determined by deducting matched-maturity funding rates prevailing at the time of concluding a transaction from the interest rate charged to the client. The input parameters required for this purpose are set at the time of originating a new business transaction, within the scope of accounting for individual transactions. In addition, income from investing the Bank's own funds is included at segment level. The allocation of liquidity costs to the operating segments is based on the transfer price mechanism for the individual transaction.

Further income or expenses that cannot be allocated directly to a specific lending transaction (in particular, the results from disposal of assets held for liquidity management, from market-induced effects on net income from fair value measurement, hedging relationships, and the bank levy) are allocated to the business segments, usually on a pro-rata basis, in line with financing volumes.

The allocation of general and administrative expenses to the operating segments differentiates between expenses which can be directly attributed and those which are not directly attributable. Expenses (of the sales units, for example) which are directly attributable can be clearly assigned to the segments via the cost centre. Expenses (of the central units, for example) which are not directly attributable are assigned to the segments' cost centres via well-defined allocation models. Net income from restructuring is allocated to the segments using the same ratio as the administrative expenses.

Segment risk-weighted assets (RWA) are determined in accordance with the allocation of individual transactions (credit risk, for example) and with the allocated risk types (operational risks, for example). Risk types which are not directly attributable are assigned to the segments in accordance with -defined allocation models.

As expected and in accordance with the previous capital markets communications, risk-weighted assets (RWA) increased in the fourth quarter of 2019 to €17.7 billion at the end of the year. The reason for the increase was a higher risk weighting in strategic Commercial Real Estate Finance sub-portfolios, which was oriented on the new provisions set out by the European Banking Authority (EBA) and the Basel IV international banking framework. At the same time, pbb is also addressing the expectations of the capital market to take the pending regulatory changes into account at an early stage while smoothing out cyclical RWA fluctuations at the same time.

Banks use standard approaches as well as internal, IRBA (Internal Rating Based Approach) rating models to determine the RWA. Within the scope of reviewing the internal model in conjunction with the Targeted Review of Internal Models (TRIM), pbb transferred sub-portfolios to the standard approach in the fourth quarter; this mainly concerned loans to public-sector borrowers and financial institutions. This led to a RWA decline in the PIF and VP segments and in C&A. In parallel to this, pbb revised the remaining IRBA models for the main portfolios in Commercial real Estate Finance in line with the regulatory requirements, particularly the EBA guidelines. This model revision is expected to be finalised in the course of 2020. The objective is to find a new model environment that significantly reduces the complexity. Targeted new risk weightings in the core portfolio were already taken into account as at 31 December 2019, where a higher calibration was applied to the loss given defaults (LGD). This had the effect of increasing the risk-weighted assets that pbb Group had set at a Basel-IV compliant level. Thanks to good capitalisation, the capital ratios also remain well above the

regulatory requirements even after these changes were implemented. pbb Group will report RWA and capital ratios on this basis in future.

In 2019 as in the previous year equity, excluding accumulated other comprehensive income from cash flow hedge accounting and from financial assets measured at fair value through other comprehensive income as well as excluding Additional Tier 1 (AT1) capital, was allocated to the operating segments and C&A proportionally and thus consistently with the distribution of diversified economic risk (ICAAP). Despite a significant increase in risk-weighted assets in the REF segment, economic capital remains the bottleneck factor for pbb Group in a medium-term perspective and thus defines the equity allocation in line with risk management.

Real Estate Finance (REF)
The REF operating segment comprises financing for professional real estate investors. These include professional national and international real estate companies, institutional investors, property funds as well as, above all in Germany, customers with a regional focus. Financed properties mainly involve office buildings, properties for residential use, retail and logistics properties as well as (business) hotels.

Public Investment Finance (PIF)
The PIF business segment comprises financing eligible for covered bonds aimed at the provision and improvement of public infrastructure. Customers in this segment include, amongst others, regions, provinces, municipalities, urban development companies, public hospitals, investment or real estate companies. Moreover, the Group is active in long-term publicly guaranteed export financings hedged by public export-credit insurers. Bond purchases, above all for cover assets pool and liquidity management, are also part of this segment.

Value Portfolio (VP)
The Value Portfolio (VP) operating segment comprises non-strategic portfolios and activities of pbb Group. The VP consists almost entirely of existing financings to the public sector which are not linked to specific projects (budget financing).

Consolidation & Adjustments (C&A) reconciles the aggregated segment results with the consolidated result. The column also includes income from the investment of allocated equity.

31 Income statement by operating segment

Income/expenses

in € million		REF	PIF	VP	C&A	pbb Group
Operating income	2019	433	34	34	5	**506**
	2018	391	38	37	5	**471**
Net interest income	2019	385	35	33	5	**458**
	2018	372	34	39	5	**450**
Net fee and commission income	2019	7	-	-1	-	**6**
	2018	6	1	-1	-	**6**
Net income from fair value measurement	2019	-8	-2	3	-	**-7**
	2018	-8	-2	1	-	**-9**
Net income from realisations	2019	48	1	-1	-	**48**
	2018	27	5	-	-	**32**
Net income from hedge accounting	2019	-1	-	-1	-	**-2**
	2018	-1	-	-	-	**-1**
Net other operating income	2019	2	-	1	-	**3**
	2018	-5	-	-2	-	**-7**
Net income from risk provisioning	2019	-57	-	8	-	**-49**
	2018	-22	4	4	-	**-14**
General and administrative expenses	2019	-164	-25	-13	-	**-202**
	2018	-154	-27	-12	-	**-193**
Expenses from bank levies and similar dues	2019	-14	-3	-7	-	**-24**
	2018	-14	-4	-7	-	**-25**
Net income from write-downs and write-ups of non-financial assets	2019	-15	-2	-1	-	**-18**
	2018	-12	-2	-1	-	**-15**
Net income from restructuring	2019	3	-	-	-	**3**
	2018	-7	-1	-1	-	**-9**
Profit before tax	**2019**	**186**	**4**	**21**	**5**	**216**
	2018	**182**	**8**	**20**	**5**	**215**

Cost-income ratio[1]

in %		REF	PIF	VP	pbb Group
Cost-income ratio	2019	41.3	79.4	41.2	**43.5**
	2018	42.5	76.3	35.1	**44.2**

[1] Cost-income ratio is the ratio of general and administrative expenses and net income from write-downs and write-ups on non-financial assets to operating income.

32 Balance-sheet-related measures by operating segment

The Management Board controls balance-sheet-related measures by operating segments based on financing volumes, on risk-weighted assets and on equity.

Balance-sheet-related measures

in € billion		REF	PIF	VP	C&A	pbb Group
Financing volumes[1]	31.12.2019	27.1	6.3	12.1	-	**45.5**
	31.12.2018	26.8	6.4	13.2	-	**46.4**
Risik-weighted assets[2]	31.12.2019	15.8	0.8	0.5	0.6	**17.7**
	31.12.2018	8.3	1.4	4.0	0.9	**14.6**
Equity[3]	31.12.2019	1.5	0.1	0.8	0.5	**2.9**
	31.12.2018	1.4	0.1	1.1	0.3	**2.9**

[1] Notional amounts of the drawn parts of granted loans and parts of the securities portfolio..
[2] Including risk-weighted credit risk positions as well as the capital requirements for market risk positions and operational risks scaled with the factor 12.5.
[3] Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI and AT1 capital.

33 Breakdown of operating income

Operating income by products

Operating income by products

in € million		Real estate financing	Public investment financing	Other Products	**pbb Group**
Operating income	2019	433	34	39	**506**
	2018	391	38	42	**471**

Operating income by regions

pbb Group differentiates between the regions Germany, Rest of Europe and America. Allocation of values to regions is based on the location of the registered offices of the Group companies or their branches.

Operating income by regions

in € million		Germany	Rest of Europe	Amerika	**pbb Group**
Operating income	2019	450	52	4	**506**
	2018	415	55	1	**471**

Operating income by customers

There were no significant customers within the meaning of IFRS 8.34 in the financial years 2019 and 2018.

NOTES TO THE INCOME STATEMENT

34 Net interest income

Net interest income

in € million	**2019**	**2018**
Interest income	1,766	1,834
from financial assets at fair value through profit or loss	302	316
from financial assets at fair value through other comprehensive income	59	65
from financial assets at amortised cost	1,223	1,245
from hedge accounting derivatives (net)[1]	188	210
from other assets	5	5
negative interest from non-derivative financial liabilities	-11	-7
Interest expenses	-1,308	-1,384
from financial liabilities at fair value through profit or loss	-365	-366
from financial liabilities measured at amortised cost	-944	-1,020
positive interest from non-derivative financial assets	1	2
Total	**458**	**450**

[1] Includes positive interest expenses (net) from hedge accounting derivatives in the amount of €22 million (2018: €15 million).

35 Net fee and commission income

Net fee and commission income

in € million	2019	2018
Fee and commission income	8	8
from financial assets at amortised cost and financial liabilties not at fair value through profit or loss	8	8
Other lending business	8	8
Fee and commission expenses	-2	-2
from financial assets at amortised cost and financial liabilties not at fair value through profit or loss	-2	-2
Securities and custodial services	-1	-1
Other lending business	-1	-1
Total	**6**	**6**

Fee and commission income is recognised at a point in time when the performance obligation is satisfied, i.e. the service is provided, by pbb Group. Fee and commission income is generated in the REF segment.

36 Net income from fair value measurement

Net income from fair value measurement

in € million	2019	2018
Net income from stand-alone derivatives	-18	-1
Interest derivatives	-18	-1
Net income from other financial assets at fair value through profit or loss	11	-8
From debt instruments	11	-8
Debt securities	8	-15
Loans and advances	3	7
Total	**-7**	**-9**

37 Net income from realisations

Net income from realisations

in € million	2019	2018
Income from derecognition of financial instruments	50	33
from financial assets at amortised cost	50	31
from disposal	1	5
from early repayment	49	26
from financial liabilities measured at amortised cost	-	2
from early repayment	-	2
Expenses from derecognition of financial instruments	-2	-1
from financial assets at fair value through other comprehensive income	-1	-1
from disposal	-1	-
from early repayment	-	-1
from financial liabilities measured at amortised cost	-1	-
from early repayment	-1	-
Total	**48**	**32**

38 Net income from hedge accounting

Net income from hedge accounting

in € million	2019	2018
Net income from micro fair value hedge accounting	-2	-
from hedged items	125	77
from hedging instruments	-127	-77
Net income from portfolio hedge accounting	-	-1
from hedged items	-55	-22
from hedging instruments	55	21
Total	**-2**	**-1**

39 Net other operating income

Net other operating income

in € million	2019	2018
Net income from foreign currency translation	-2	-2
Net income from provisions in non-lending business	-	-4
Miscellaneous other operating income	5	-1
Total	**3**	**-7**

40 Net income from risk provisioning

Net income from risk provisioning

in € million	2019	2018
From financial assets	-49	-10
Stage 1	-15	-
Stage 2	-1	9
Stage 3	-33	-19
Income from recoveries from written-off financial assets	1	1
Net income from provisions in off balance sheet lending business	-1	-5
Total	**-49**	**-14**

Net income from risk provisioning from financial assets resulted from financial assets “at amortised cost” apart from a release of €1 million (2018: €0 million) from financial assets “at fair value through other comprehensive income” in stage 2.

41 General and administrative expenses

General and administrative expenses

in € million	2019	2018
Personnel expenses	-117	-114
Wages and salaries	-95	-93
Social security expenses	-13	-13
Pension expenses and related employee benefit expenses	-10	-10
Other personnell expenses/income	1	2
Non-personnel expenses	-85	-79
Office and operating expenses	-8	-10
Consulting expenses	-20	-15
IT expenses	-43	-39
Other non-personnel expenses	-14	-15
Total	**-202**	**-193**

42 Expenses from Bank Levies and Similar Dues

Expenses from bank levies and similar dues[1]

in € million	2019	2018
Bank levies	-20	-21
Deposit protection fund	-3	-3
Compensation scheme of German banks	-1	-1
Total	**-24**	**-25**

[1] Includes administrative expenses invoiced for the dues/levies.

43 Net Income from Write-downs and Write-Ups of Non-financial Assets

Net income from write-downs and write-ups of non-financial assets

in € million	2019	2018
Depreciation or amortisation	-18	-14
Tangible assets	-6	-3
Thereof: Right-Of-Use of lease assets	-3	-
Intangible assets	-12	-11
Impairments	-	-1
Intangible assets	-	-1
Total	**-18**	**-15**

44 Net Income from Restructuring

Net income from restructuring

in € million	2019	2018
Income from reversals of restructuring provisions	4	-
Expenses from additions to restructuring provisions	-1	-9
Total	**3**	**-9**

45 Icome Tax

Breakdown

in € million	2019	2018
Current taxes	-22	-35
Deferred taxes	-15	-1
Thereof: Deferred taxes on losses carried forward	9	-83
Total	**-37**	**-36**

Current taxes include a tax income for prior years of €17 million (2018: tax expenses of €4 million). The tax income for prior years largely comprise a tax expense of €7 million due to the effects from tax audits, as well as a tax income of €24 million due to the tax treatment of a non-interest liability.

For domestic companies, the deferred taxes are calculated using the future uniform rate of corporation tax of 15.0% plus the corresponding 5.5% solidarity surcharge and the trade tax depending on the locally applicable assessment rate (the current basic rate is 3.5%). For pbb, the tax rate for the calculation of deferred taxes is 27.67% (2018: 27.67%).

The following overview shows the development of the deferred taxes recognised in the financial statements:

Development of deferred taxes

in € million	2019	2018
Deferred taxes recognised in the statement of financial position	90	86
Difference to prior year	4	-1
Thereof: Recognised in profit or loss	-15	-1
OCI from pension commitments	10	-1
OCI from financial assets at fair value through OCI	4	9
OCI from Cash flow hedge accounting	5	8
Effects from initial adoption of IFRS 9	-	-16

The change in deferred taxes recognised outside profit or loss regarding accumulated other comprehensive income from pension commitments in the amount of €10 million (2018: €-1 million) is included in deferred taxes from provisions.

The change in deferred taxes recognised outside profit or loss regarding accumulated other comprehensive income from financial assets measured at fair value through profit or loss in the amount of €4 million (2018: €9 million) is included in deferred taxes from financial assets measured at fair value through other comprehensive income.

The change in deferred taxes recognised outside profit or loss regarding accumulated other comprehensive income from cash flow hedge accounting in the amount of €5 million (2018: €8 million) is included in deferred taxes from positive/negative fair values of hedging derivatives.

Reconciliation

in € million (unless otherwise indicated)	2019	2018
Profit or loss before tax	216	215
Applicable (legal) tax rate in %	27.67	27.67
Expected (computed) tax expense	-60	-59
Tax effects		
arising from tax-free income	-1	-
arising from deductible and non-deductible items	-46	82
arising from valuation adjustments and non-application of deferred taxes	52	-55
arising from prior years	18	-4
Reported income taxes	**-37**	**-36**
Group tax ratio in %	**17.13**	**16.74**

Following the precise determination on euro basis, the corporate tax rate is at 17.15% (2018: 16.71%)

The tax rate applicable for the reporting year, including solidarity surcharge, is 27.67% (2018: 27.67%) and is comprised of the 15.0% German corporate tax rate currently valid, the payable solidarity surcharge of 5.5% as well as the average trade tax rate of 11.84% (2018: 11.84%).

Foreign tax rates ranged between 19.0% and 28.0%.

The effects attributable to deductible and non-deductible items relate primarily to non-deductible expenses, which do not have to be taken into account as deferred taxes as a result of permanent differences, but which have reduced or increased the basis of taxation.

The effects arising from valuation adjustments and non-application of deferred taxes, on the one hand, comprise effects from the write up of deferred tax assets on losses carried forward and, on the other hand, opposing effects from the use of tax losses carried forward previously not accounted for.

The effects from previous years include current taxes for previous years which have been incurred as a result of tax audits or a reassessment of other issues (especially non-interest liability).

The Group tax ratio is the quotient of the stated income taxes (current and deferred taxes) and profit before tax.

The deferred tax liabilities or deferred tax assets relate to the following items:

Deferred tax liabilities/assets

in € million	2019	2018
Financial assets at amortised cost after credit loss allowances	46	36
Positive fair values of hedge accounting derivatives	40	70
Financial liabilities at fair value through profit or loss	168	113
Other assets/liabilities	29	21
Deferred tax liabilities before offsetting	**283**	**240**
Offsetting	-283	-240
Deferred tax liabilities after offsetting	**-**	**-**
Financial assets at fair value through profit or loss	126	46
Positive/negative fair values of hedge accounting derivatives	117	122
Provisions	66	104
Other assets/liabilities	38	36
Losses carried forward	26	18
Deferred tax assets before offsetting	**373**	**326**
Offsetting	-283	-240
Deferred tax assets after offsetting	**90**	**86**

On the reporting date, there are unused tax losses carried forward totalling €3,275 million (2018: €3,314 million) at corporate tax level and €3,364 million (2018: €3,397 million) at trade tax level. Deferred tax assets have been recognised on a portion of €94 million (2018: €64 million) at corporate tax level and €94 million (2018: €64 million) at trade tax level, because the criteria for recognition in accordance with IAS 12.34 et seq. were satisfied. The impairment assessment as regards deferred tax assets on tax loss carryforwards is based on a tax planning which was derived from general corporate planning. Loss carryforwards may be applied for an unlimited period, unless in the event of a change of shareholders which is detrimental for tax purposes. No allowance was recognised on deferred taxes from temporary differences in the financial year 2019 and 2018. Deferred tax income from the origination and reversal of temporary differences arose in the amount of €24 million (2018: deferred tax income of €82 million).

Tax rate changes did not result in major deferred tax expenses or income in the current year nor in the previous year.

The use of tax losses previously not recognised resulted in no reduction in the current income tax expense (2018: no reduction in the current income tax expense). From the origination and write-up of loss carryforwards previously recognised, deferred tax income arose in the amount of €9 million (2018: deferred tax expense arose of €83 million).

2019 there were no differences associated with investments in subsidiaries (2018: no differences). In the prior year on differences associated with investments in subsidiaries, deferred tax liabilities have not been recognised because pbb Group has the ability and the intention to invest profits permanently in these subsidiaries.

46 Net Gains/Net Losses

The income statement contains the following net gains/net losses recognised in profit or loss by measurement categories:

Net Gains/Net Losses by measurement categories

in € million	2019	2018
Financial assets		
at fair value through profit ot loss	-7	-9
from stand-alone derivatives	-18	-1
from debt instruments	11	-8
at fair value through other comprehensive income	-	-1
at amortised cost	-	22
Financial liabilities		
at amortised cost	-1	2

The net gains and losses include additions to and reversals of credit loss allowances, derecognition gains and losses as well as the fair value measurement results from financial instruments recognised in profit or loss.

47 Earnings Per Share

Earnings per share

		2019	2018
Net income attributable to shareholders of pbb	in € million	179	179
Thereof attributable to the ordinary shareholders	in € million	162	167
Thereof attributable to the AT1 investors	in € million	17	12
Average number of ordinary shares issued	pieces	134,475,308	134,475,308
Adjusted average number of ordinary shares issued pieces	pieces	134,475,308	134,475,308
Basic earnings per share	in €	**1.20**	**1.24**
Diluted earnings per share	in €	**1.20**	**1.24**

Earnings per share are calculated in accordance with IAS 33 by dividing net income/loss attributable to the ordinary shareholders holders by weighted average number of ordinary shares. Net income/loss is allocated under the assumption of after-tax interests for the AT1 capital, which are accrued pro rata temporis.

NOTES TO THE STATEMENT OF FINANCIAL POSITION (ASSETS)

48 Cash reserve

Cash reserve

in € million	31.12.2019	31.12.2018
Balances with central banks	1,141	1,388
Total	**1,141**	**1,388**

Cash on hand as of 31 December 2019 amounts to €0 million as was the case in previous year.

49 Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss

in € million	31.12.2019	31.12.2019
Positive fair values of stand-alone derivatives	717	749
Interests in companies and funds qualified as debt instruments	3	3
Debt securities	130	258
Bonds and notes	130	258
Public-sector issuers	88	81
Other issuers	42	177
Loans and advances to customers	456	649
Public-sector loans and advances	278	327
Real estate loans and advances	178	322
Total	**1,306**	**1,659**

50 Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income

in € million	31.12.2019	31.12.2018
Debt securities	1,325	1,564
Bonds and notes	1,325	1,564
Public-sector issuers	582	676
Other issuers	743	888
Loans and advances to other banks	15	16
Public-sector loans and advances	15	16
Loans and advances to customers	356	404
Public-sector loans and advances	356	404
Total	**1,696**	**1,984**

51 Financial assets at amortised cost after credit loss allowances[1]

Financial assets at amortised cost before credit loss allowances

in € million	31.12.2019	31.12.2018
Debt securities	7,679	8,039
Bonds and notes	7,679	8,039
Public-sector issuers	5,672	5,550
Other issuers	2,007	2,489
Loans and advances to other banks	2,356	2,231
Public-sector loans and advances	548	544
Other loans and advances to other banks	1,808	1,687
Loans and advances to customers	40,316	40,183
Public-sector loans and advances	13,131	13,458
Real estate loans and advances	26,922	26,512
Other loans and advances to customers	55	1
Claims from finance lease agreements	208	212
Total	**50,351**	**50,453**

[1] including claims from finance lease agreements.

Development in risk provisioning

in € million	**1.1.2019**	Transfer Stage 1	Transfer Stage 2	Transfer Stage 3	New Business and additions	Repayments and derecognitions	Amounts used	Changes of credit risk (net)	Other changes	**31.12.2019**
Allowances for credit losses on financial assets	-113	-	-	-	-9	4	36	-43	-2	-127
measured at fair value through other comprehensive income	-1	-	-	-	-	1	-	-	-	-
Debt securities	-1	-	-	-	-	1	-	-	-	-
Stage 2	-1	-	-	-	-	1	-	-	-	-
measured at amortised cost	-112	-	-	-	-9	3	36	-43	-2	-127
Debt securities	-5	-	-	-	-	-	-	2	-	-3
Stage 1	-1	-1	-	-	-	-	-	-	-	-2
Stage 2	-4	1	-	-	-	-	-	2	-	-1
Loans and advances to customers	-107	-	-	-	-9	3	36	-45	-2	-124
Stage 1	-13	-	3	-	-9	3	-	-8	-	-24
Stage 2	-38	-	-3	-	-	-	-	-4	-	-45
Stage 3	-56	-	-	-	-	-	36	-33	-2	-55
Provisions in the off-balance-sheet lending business (contingent liabilities and other commitments)	-7	-	-	-	-7	2	-	4	-	-8
Stage 1	-6	-	-	-	-7	2	-	4	-	-7
Stage 2	-1	-	-	-	-	-	-	-	-	-1
Total	**-120**	**-**	**-**	**-**	**-16**	**6**	**36**	**-39**	**-2**	**-135**

Development in risk provisioning

in € million	**1.1.2018**	Transfer Stage 1	Transfer Stage 2	Transfer Stage 3	New Business and additions	Repayments and derecognitions	Amounts used	Changes of credit risk (net)	Other changes	**31.12.2018**
Allowances for credit losses on financial assets	-105	-	-	-	-9	4	1	-5	1	-113
measured at fair value through other comprehensive income	-1	-	-	-	-	-	-	-	-	-1
Debt securities	-1	-	-	-	-	-	-	-	-	-1
Stage 2	-1	-	-	-	-	-	-	-	-	-1
measured at amortised cost	-104	-	-	-	-9	4	1	-5	1	-112
Debt securities	-10	-	-	-	-	-	-	5	-	-5
Stage 1	-1	-	-	-	-	-	-	-	-	-1
Stage 2	-9	-	-	-	-	-	-	5	-	-4
Loans and advances to customers	-94	-	-	-	-9	4	1	-10	1	-107
Stage 1	-12	-1	-	-	-9	3	-	6	-	-13
Stage 2	-43	1	-	-	-	1	-	3	-	-38
Stage 3	-39	-	-	-	-	-	1	-19	1	-56
Provisions in the off-balance-sheet lending business (contingent liabilities and other commitments)	-2	-	-	-	-1	1	-	-5	-	-7
Stage 1	-2	-	-	-	-1	1	-	-4	-	-6
Stage 2	-	-	-	-	-	-	-	-1	-	-1
Total	**-107**	**-**	**-**	**-**	**-10**	**5**	**1**	**-10**	**1**	**-120**

If all stage 1 financial assets were in stage 2, the balance of credit loss allowances as at 31 December 2019 would increase by €63 million (31 December 2018: €25 million). For off-balance sheet transactions, the increase would be €13 million (31 December 2018: €9 million).

If all stage 2 financial assets were in stage 1, the balance of credit loss allowances would decrease by €26 million (31 December 2018: €28 million). For off-balance sheet transactions, the decrease would be €1 million (31 December 2018: €1 million).

Development in gross carrying amounts

in € million	**1.1.2019**	Transfer Stage 1	Transfer Stage 2	Transfer Stage 3	New Business and additions	Repayments and derecognitions	Direct write-offs	Other	**31.12.2019**
Gross carrying amounts of financial assets	52,334	-	-	-	9,562	-10,878	-12	953	51,959
measured at fair value through other comprehensive income	1,881	-	-	-	-	-260	-	-13	1,608
Debt securities	1,507	-	-	-	-	-228	-	-10	1,269
Stage 1	1,231	145	-	-	-	-103	-	-6	1,267
Stage 2	276	-145	-	-	-	-125	-	-4	2
Loans and advances to other banks	15	-	-	-	-	-	-	-	15
Stage 1	15	-	-	-	-	-	-	-	15
Loans and advances to customers	359	-	-	-	-	-32	-	-3	324
Stage 1	359	-	-	-	-	-32	-	-3	324
measured at amortised cost	50,453	-	-	-	9,562	-10,618	-12	966	50,351
Debt securities	8,039	-	-	-	50	-504	-	94	7,679
Stage 1	7,496	543	-	-	50	-504	-	94	7,679
Stage 2	543	-543	-	-	-	-	-	-	-
Loans and advances to other banks	2,231	-	-	-	364	-177	-	-62	2,356
Stage 1	2,231	-	-	-	364	-177	-	-62	2,356
Loans and advances to customers	40,183	-	-	-	9,148	-9,937	-12	934	40,316
Stage 1	38,289	328	-2,621	-262	9,148	-9,491	-	1,339	36,730
Stage 2	1,578	-328	2,621	-114	-	-238	-	-425	3,094
Stage 3	316	-	-	376	-	-208	-12	20	492
Off-balance-sheet business[1]	4,691	-	-	-	3,240	-3,669	-	48	4,310
Stage 1	4,638	10	-124	-	3,240	-3,628	-	46	4,182
Stage 2	53	-10	124	-	-	-41	-	2	128
Stage 3	-	-	-	-	-	-	-	-	-
Total	**57,025**	**-**	**-**	**-**	**12,802**	**-14,547**	**-12**	**1,001**	**56,269**

[1] Notional amount of contingent liabilities and other commitments.

Development in gross carrying amounts

in € million	**1.1.2018**	Transfer Stage 1	Transfer Stage 2	Transfer Stage 3	New Business and additions	Repayments and derecognitions	Direct write-offs	Other	**31.12.2018**
Gross carrying amounts of financial assets	52,474	-	-	-	10,144	-10,147	-1	-136	52,334
measured at fair value through other comprehensive income	2,047	-	-	-	3	-147	-	-22	1,881
Debt securities	1,664	-	-	-	3	-140	-	-20	1,507
Stage 1	1,385	-	-	-	3	-140	-	-17	1,231
Stage 2	279	-	-	-	-	-	-	-3	276
Loans and advances to other banks	15	-	-	-	-	-	-	-	15
Stage 1	15	-	-	-	-	-	-	-	15
Loans and advances to customers	368	-	-	-	-	-7	-	-2	359
Stage 1	368	-	-	-	-	-7	-	-2	359
measured at amortised cost	50,427	-	-	-	10,141	-10,000	-1	-114	50,453
Debt securities	8,667	-	-	-	67	-604	-	-91	8,039
Stage 1	7,663	248	-	-	67	-401	-	-81	7,496
Stage 2	1,004	-248	-	-	-	-203	-	-10	543
Loans and advances to other banks	2,400	-	-	-	328	-501	-	4	2,231
Stage 1	2,400	-	-	-	328	-501	-	4	2,231
Loans and advances to customers	39,360	-	-	-	9,746	-8,895	-1	-27	40,183
Stage 1	36,782	688	-620	-67	9,746	-8,202	-	-38	38,289
Stage 2	2,384	-688	620	-90	-	-662	-	14	1,578
Stage 3	194	-	-	157	-	-31	-1	-3	316
Off-balance-sheet business[1]	4,665	-	-	-	4,142	-4,123	-	7	4,691
Stage 1	4,540	68	-93	-	4,142	-4,020	-	1	4,638
Stage 2	122	-68	93	-	-	-100	-	6	53
Stage 3	3	-	-	-	-	-3	-	-	-
Total	**57,139**	**-**	**-**	**-**	**14,286**	**-14,270**	**-1**	**-129**	**57,025**

[1] Notional amount of contingent liabilities and other commitments.

The development in gross carrying amounts in 2018 was adjusted due to IAS 8.42 (see note "Consistency").

In contrast to the balance sheet the gross carrying amount of financial assets at fair value through profit or loss does not include the cumulative changes in fair value of €88 million (31 December 2018: €103 million).

pbb Group's maximum exposure to credit risk is reflected in the net carrying amounts reported in the statement of financial position. The collaterals mainly consist of land charges. Loans and advances to customers of stage 3 were collateralised in an amount of €436 million as at the reporting date (31 December 2018: €260 million).

At pbb Group, contractual amounts outstanding of €0 million (31 December 2018: € 0 million) existed for financial assets that were written off in 2019 and that continue to be subject to enforcement measures.

Due to collateral provided, pbb Group did not recognise stage 3 credit loss allowances as at 31 December 2019 for credit-impaired financial instruments with a carrying amount of €101 million (31 December 2018: €3 million). The collateral is largely in the form of state guarantees.

In 2019, the contractual cash flows of a government-guaranteed transaction, for which the allowance is measured in the amount of the expected credit losses over the term, were adjusted to amortised cost before modification in the amount of €98 million. The modification was not so extensive that the previous financial instrument had to be derecognised and recognised as a modified new financial instrument. This modification, as well as other modifications, did not have any material effects on the income statement in 2019 and 2018.

pbb Group did not hold any salvage acquisitions or other seized collateral as at 31 December 2019 and 31 December 2018.

52 Positive fair values of hedge accounting derivatives

Positive fair values of hedge accounting derivatives

in € million	31.12.2019	31.12.2018
Positive market values of hedge accounting derivatives	2,199	2,207
Total	**2,199**	**2,207**

53 Valuation adjustment from portfolio hedge accounting (assets)

The line item valuation adjustments from portfolio hedge accounting includes the positive fair values in relation to the hedged risks in the portfolios of hedged items. They amounted to €19 million as at 31 December 2019 (31 December 2018: €2 million).

54 Tangible assets

Development of tangible assets

in € million	Operating equipment 2019	Right of Use assets (IFRS 16) 2019	Total 2019	Total 2018
Acquisition/production costs				
Balance at 31.12.	**22**	**-**	**22**	**21**
IFRS 16 first time adoption	-	9	**9**	-
Balance at 1.1.	**22**	**9**	**31**	**21**
Additions	5	34	39	1
Disposals	-12	-	-12	-
Balance at 31.12.	**15**	**43**	**58**	**22**
Depreciation and write-ups				
Balance at 1.1.	**-18**	**-**	**-18**	**-15**
Amortisation	-3	-3	-6	-3
Disposals	11	-	11	-
Balance at 31.12.	**-10**	**-3**	**-13**	**-18**
Carrying amounts				
Balance at 31.12.	**5**	**40**	**45**	**4**

55 Intangible assets

Development of tangible assets

in € million	Software acquired 2019	Internally developed Software 2019	Other intangible assets 2019	Total 2019	Total 2018
Acquisition/production costs					
Balance at 1.1.	**23**	**75**	**3**	**101**	**114**
Additions	3	6	5	14	13
Reclassifications	1	1	-2	-	-
Disposals	-	-	-	-	-26
Balance at 31.12.	**27**	**82**	**6**	**115**	**101**
Amortisation and write-ups					
Balance at 1.1.	**-17**	**-47**	**-**	**-64**	**-78**
Amortisation	-1	-11	-	-12	-11
Impairment	-	-	-	-	-1
Disposals	-	-	-	-	26
Balance at 31.12.	**-18**	**-58**	**-**	**-76**	**-64**
Carrying amounts					
Balance at 31.12.	**9**	**24**	**6**	**39**	**37**

Research and development expenditure recognised as an expense amounted to €11 million (2018: €8 million).

56 Repurchase agreements

As a pledgor of genuine repurchase agreements, pbb Group has pledged assets with a book value of €2.1 billion (31 December 2018: €2.1 billion). The material part of the securities is still recognised as assets. The considerations which have been received amount to €1.9 billion (31 December 2018: €1.9 billion) and are recognised solely as liabilities measured at amortised cost. Assets in repurachse agreements are the only transferable assets the acquirer can sell or repledge in the absence of default.

NOTES TO THE STATEMENT OF FINANCIAL POSITION (EQUITY AND LIABILITIES)

57 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss

in € million	31.12.2019	31.12.2018
Negative fair values of stand-alone derivatives	762	881
Total	**762**	**881**

58 Financial liabilities at amortised cost

Financial liabilities at amortised cost

in € million	31.12.2019	31.12.2018
Liabilities to other banks	4,195	3,867
Liabilities to central banks	1,878	1,886
Registered Mortgage Pfandbriefe	306	228
Registered Public Pfandbriefe	322	290
Other registered securities	102	23
Other liabilities to other banks	1,587	1,440
Liabilities to customers	23,985	24,901
Registered Mortgage Pfandbriefe	4,647	4,550
Registered Public Pfandbriefe	9,926	10,194
Other registered securities	2,480	2,427
Other liabilities to customers	6,932	7,730
Bearer bonds	20,858	21,237
Money market instruments	70	35
Mortgage Pfandbriefe	12,359	12,376
Public Pfandbriefe	3,007	4,680
Other bearer bonds	5,422	4,146
Subordinated liabilities	703	709
Securitised subordinated liabilities	643	649
Non-securitised subordinated liabilities	60	60
Total	**49,741**	**50,714**

59 Negative fair values of hedge accounting derivatives

Negative fair values of hedge accounting derivatives

in € million	31.12.2019	31.12.2018
Negative market values of hedge derivatives	2,562	2,538
Total	**2,562**	**2,538**

60 Valuation adjustment from portfolio hedge accounting (liabilities)

The item "Valuation adjustment from portfolio hedge accounting (liabilities)" comprises negative fair values as regards the hedged risks in the hedged portfolios of hedged items. They totalled € 81 million as at 31 December 2019 (31 December 2018: € 23 million).

61 Provisions

Provisions

in € million	31.12.2019	31.12.2018
Provisions for pensions and other post employment defined benefit obligations	121	84
Restructuring provisions	1	11
Provisions for commitments and guarantees given	8	7
Other provisions	133	166
Total	**263**	**268**

There are defined contribution and defined benefit plans for the employees of pbb Group. In the defined contribution plans pbb makes payments for commitments by industry-wide organisations. In almost all non-German entities, a defined percentage of fixed salary is paid into externally managed pension funds for employees as part of defined contribution pension schemes. Expenses in respect of defined contribution plans amounted € 3 million (2018: € 3 million). The expense is expected to remain stable in 2020. Expenses in respect of defined contribution plans for persons with a key function in the Group amounted to less than € 1 million (2018: less than €1 million). The employer's contribution to the statutory pension insurance amounted to € 5 million (2018: € 5 million).

There are defined benefit pension commitments for many employees in Germany. There are no defined benefit pension commitments in the non-German entities. For the defined benefit plans the employees receive a direct commitment from their respective company. The receipt of retirement pensions or disability pensions starts after a vesting period is fulfilled, at the earliest after reaching a minimum age in the case of part of full incapacity for work, at the latest when goind into retirment, usually after completion of the 65th year of life. In case of active employees, there are predominatnly modern modular pension plans. For the other eligible persons there are also final salarybased defined benefit plans. The annual pension module depends, among other things, on the gross annual salary paid and the member's length of service. The surviving dependant's pension usually amounts to 60% of the pension of the spouse respectively the entitlement on that. The pension plan is administered by pbb itelf with the aid of an external service provider for the administration.

Pension provisions are recognised for obligations arising from direct commitments. The defined benefit plans have been principally closed for new entrants since 1 April 2004. There have been no plan amendments, curtailments and settlements in the years 2019 and 2018.

The risk of insolvency is covered within the framework of legal requirements by Pensionssicherungs-verein a. G. in relation to the total amount of pension obligations.

The following actuarial assumptions were used to measure the defined benefit pension obligations:

Actuarial assumptions

in %	31.12.2019/ 1.1.2020	31.12.2018/ 1.1.2019
Discount rate	1.30	2.02
Rate of increase in pension obligations	1.75	1.50
Rate of increase in future compensation and vested rights[1]	2.50	2.50

[1] Against the background of the adjustments of annual base salaries made in 2015 to a uniform amount of € 500,000 and the introduction of a variable remuneration component, pbb Group expects a rate of increase in future compensation and vested rights of 0%, also in view of the appropriateness of Management Board compensation for the active Management Board members in the financial years 2019 and 2018.

The rate of increase in career for members of the Management Board amounts 0.0% (31 December 2017: 0.0%), for directors and non-pay-scale staff 1.5% (31 December 2017: 1.5%) and for payscale staff 0.5% (31 December 2017: 0.5%). The guidance tables 2018G from Klaus Heubeck were used as the biometric basis.

The defined benefit pension commitments of pbb do not contain any unusual or entity-specific risks. pbb is faced by the common demographic risks, for example from longevity or invalidity of the entitled employees, and common financial risks like for example a change of the discount rate. pbb took out reinsurance to protect itself against parts of these risks. The reinsurance is a qualifying insurance policy in accordance with IAS 19 and thus is a plan asset. The fair value of plan assets is a component of the net liability from defined benefit plans which is deducted from the present value of the defined benefit obligation. The reinsurance does not consist of any unusual or plan-specific risks.

Principally, the pension payments of the reinsured pension obligations are funded by the income from the plan assets. If the income does not cover the pension payments pbb has to pay the pensions out of its own funds. For the non-reinsured pension obligations the payments are also made out of own funds.

Statement of financial position items (net defined benefit liability)

in € million	2019	2018
Present value of defined benefit obligation	303	272
Fair value of plan assets	-182	-188
Total	**121**	**84**

Development of net defined benefit liability

in € million	2019	2018
Balance at 1.1.	**84**	**86**
Pension expenses	5	5
Remeasurements	36	-3
Direct payments to beneficiaries	-4	-4
Balance at 31.12.	**121**	**84**

Development of defined benefit obligation

in € million	2019	2018
Balance at 1.1.	**272**	**279**
Current service costs	3	3
Interest expenses	5	5
Remeasurements	35	-2
Actuarial gains/losses from demographic assumptions	-	3
Actuarial gains/losses from financial assumptions	37	-3
Actuarial gains/losses from experience assumptions	-2	-2
Payments to beneficiaries	-12	-13
Balance at 31.12.	**303**	**272**

Plan assets consist exclusively of reinsurance pledged to plan beneficiaries. The plan assets accordingly do not contain any own financial instruments or any own used tangible assets. No further material contributions to the plan assets are aimed in 2020. pbb does not use special asset-liability matching strategies to manage the pledged reinsurance.

Development of fair value of plan assets

in € million	2019	2018
Balance at 1.1.	**188**	**193**
Interest income	3	3
Remeasurements	-1	1
Payments to beneficiaries	-8	-9
Balance at 31.12.	**182**	**188**

Development of pension expenses

in € million	2019	2018
Service costs	3	3
Current service costs	3	3
Net interest expenses	2	2
Interest expenses on defined benefit obligation	5	5
Interest income on plan assets	-3	-3
Total	**5**	**5**

Compared to 2019 a largely constant pension expense is expected for 2020. Pension expenses are part of general and administrative expenses.

Remeasurements of the net defined benefit liability result from actuarial gains and losses and the return on plan assets excluding amounts included in net interest on the net defined benefit liability.

Remeasurement recognised in other comprehensive income (equity)

in € million	2019	2018
Actuarial gains/losses from demographic assumptions	-	-3
Actuarial gains/losses from financial assumptions	-37	3
Actuarial gains/losses from experience assumptions	2	2
Remeasurements from plan assets	-1	1
Total	**-36**	**3**

Development of reimbursement

in € million	2019	2018
Balance at 1.1.	**2**	**2**
Disposals	-	-
Balance at 31.12.	**2**	**2**

The reimbursements result from unpledged reinsurance policies.

The quantitative sensitivity analysis – which uses the same measurement methods as the obligation recognised in the statement of financial position – for the material actuarial assumptions is as follows:

Actuarial assumptions

in € million	Change of sensitivity level (+ increase/− decrease)		Gross obligation 31.12.2019	31.12.2018
Basic value of the calculation of sensitivity			303	272
Discount rate	in percentage points	+ 0.5	281	254
	in percentage points	− 0.5	328	293
Rate of increase in pension obligations	in percentage points	+ 0.5	321	287
	in percentage points	− 0.5	287	258
Rate of increase in future compensation and vested rights	in percentage points	+ 0.5	304	273
	in percentage points	− 0.5	303	272

The assumption of mortality only has an immaterial effect because the risk of longevity is mainly covered by plan assets.

The weighted average duration of the defined benefit obligations amounted to 15 years at 31 December 2019 (31 December 2018: 15 years).

Development of provisions (without provisions for pension and similar obligations)

in € million	Restructuring provisions	Provisions for contingent liabilities and other commitments	Other provisions
Balance at 1.1.2018	**3**	**2**	**156**
Additions	9	6	38
Reversals	-	-1	-21
Amounts used	-1	-	-21
Reclassifications	-	-	14
Balance at 31.12.2018	**11**	**7**	**166**
Balance at 1.1.2019	**11**	**7**	**166**
Additions	1	5	31
Reversals	-4	-4	-15
Amounts used	-7	-	-49
Balance at 31.12.2019	**1**	**8**	**133**

The restructuring provisions are expected to have been fully used by 2021.

The provisions for contingent liabilities and other commitments mainly comprise provisions for guarantee risks, letters of credit, irrevocable loan commitments and litigation risks in the lending business.

Other provisions comprise those for legal and tax risks of € 66 million (31 December 2018: € 88 million), and for legal expenses of € 26 million (31 December 2018: € 35 million).

Legal Risks (Litigation Risks)
Given the nature of business and international expansion of activities and the large number of relevant requirements and regulations, pbb is involved in litigation, arbitration and administrative proceedings in some countries. pbb recognises provisions for the uncertain obligations arising from these proceedings if the potential outflow of resources is sufficiently likely and the amount of the obligation can be estimated. The probability of outflow of resources, which often cannot be estimated with certainty, is highly dependent on the outcome of the proceedings. The assessment of this probability and the quantification of the obligation are largely based on estimates. The actual liability can vary considerably from this estimate. Accounting for the individual legal procedure, pbb analyses developments of the individual case as well as of comparable cases. Depending on the significance and complexity of the respective case, pbb is drawing on its own expertise or opinions by external consultants and in particular by legal advisors. The provisions recognised for the proceedings are not

reported separately as pbb believes that the outcome of the proceedings would be seriously compromised by their disclosure.

The profit participation certificates issued by the predecessor institutions participated in significant losses due to the net losses for the period incurred in the years 2008 et. seq. respectively pbb's unappropriated retained losses since this time. The redemption amounts have reduced and interest payment has been suspended. Individual investors therefore initiated legal proceedings, contesting in particular various individual clauses relating to loss participation and replenishment following loss participation. The key questions in this connection are which balance sheet items must be taken into account to calculate loss participation and whether replenishment is required if pbb records a net income, unappropriated retained earnings or another income. Courts have decided against the legal opinion of pbb in view of the individual decisions regarding profit participation certificates. These proceedings resulted in a partial or comprehensive increase in redemption claims, or in the subsequent distribution of cancelled coupon payments or interest payment claims. There are no legal proceedings pending here, after the last reported legal proceeding with an amount in dispute of approximately €20 million plus interest was settled.

Hypo Real Estate Bank International AG, a predecessor institution of pbb, issued Credit Linked Notes ("CLNs") in 2007, within the scope of the Estate UK-3 ("UK-3") synthetic securitisation transaction. The CLNs were issued in order to hedge the credit risk exposure of a real estate loan portfolio in the UK. The real estate loan portfolio subsequently suffered a loan default. pbb envisaged allocating a resulting loss of GBP 113.8 million to the credit linked notes. Deloitte GmbH Wirtschaftsprüfungsgesellschaft, the trustee of UK-3, expressed doubts with respect to the permissibility of the loss allocation. In June 2017, the trustee therefore appointed an independent expert to determine whether the conditions for a loss allocation were met. On 28 June 2019, the independent expert informed pbb Group on its findings. It found the allocation of the full amount of a credit loss of GBP 113.8 million permissible. According to the terms of the CLN, the determination of the expert is final and binding – except in the absence of manifest error. On 13 September 2019, the trustee confirmed that he had reviewed the expert's report and found no apparent inaccuracy. Accordingly, the trustee has informed pbb that in his opinion the intended loss allocation is permissible. The loss allocation was made on 20 September 2019 and results in a corresponding reduction of the repayment claim under the CLN.

On 4 July 2017, the German Federal Court of Justice (Bundesgerichtshof, "BGH") determined the inadmissibility of processing fees for corporate loans agreed upon by way of a standard form. pbb still believes that the financing parameters used for complex financing structures in the lending business are generally subject to individual negotiations. pbb recognised sufficient provisions for all doubtful cases.

Moreover, no proceedings exist for which the Management Board believes the probability of an outflow of resources – or another impact on pbb Group's business activities – to be likely (or which are of material significance to pbb Group for other reasons) with an amount in dispute in excess of €5 million. However, pbb is subject to prudential proceedings, which bear the risk of a material outflow of resources, or another impact on pbb Group's business activities.

62 Other liabilities

Other liabilites include lease liabilites of € 35 million. (1 January 2019: of € 9 million).

63 Maturities of specific financial assets and liabilities

Maturities of specific financial assets and liabilities (without derivatives)

in € million	repayable on demand/ unspecified	up to 3 months	more than 3 months up to 1 year	more than 1 year up to 5 years	more than 5 years	**31.12.2019** **Total**
Cash reserve	1,141	-	-	-	-	1,141
Financial assets at fair value through profit or loss	3	4	17	90	475	589
Debt securities	-	-	-	-	130	130
Loans and advances to other banks	-	-	-	-	-	-
Loans and advances to customers	-	4	17	90	345	456
Shares in investment funds qualified as debt instruments	3	-	-	-	-	3
Financial assets at fair value through other comprehensive income	-	98	264	867	467	1,696
Debt securities	-	64	73	759	429	1,325
Loans and advances to other banks	-	-	15	-	-	15
Loans and advances to customers	-	34	176	108	38	356
Financial assets at amortised cost before credit loss allowances	1,862	1,775	5,037	20,331	21,346	50,351
Debt securities	-	248	160	2,439	4,832	7,679
Loans and advances to other banks	1,808	-	-	-	548	2,356
Loans and advances to customers	54	1,527	4,877	17,892	15,966	40,316
Total financial assets	**3,006**	**1,877**	**5,318**	**21,288**	**22,288**	**53,777**
Financial liabilities at amortised cost	2,429	3,213	4,825	20,051	19,223	49,741
Liabilities to other banks	1,052	86	43	2,296	718	4,195
Thereof: registered securities	-	61	14	184	470	729
Liabilities to customers	1,363	1,226	1,904	5,709	13,783	23,985
Thereof:registered securities	-	516	627	2,937	12,971	17,051
Bearer bonds	14	1,883	2,862	11,962	4,137	20,858
Subordinated liabilities	-	18	16	84	585	703
Total financial liabilities	**2,429**	**3,213**	**4,825**	**20,051**	**19,223**	**49,741**

Maturities of specific financial assets and liabilities (without derivatives)

in € million	repayable on demand/ unspecified	up to 3 months	more than 3 months up to 1 year	more than 1 year up to 5 years	more than 5 years	31.12.2018 Total
Cash reserve	1,388	-	-	-	-	1,388
Financial assets at fair value through profit or loss	3	142	64	221	480	910
Debt securities	-	138	-	-	120	258
Loans and advances to other banks	-	-	-	-	-	-
Loans and advances to customers	-	4	64	221	360	649
Shares in investment funds qualified as debt instruments	3	-	-	-	-	3
Financial assets at fair value through other comprehensive income	-	40	129	1,090	725	1,984
Debt securities	-	30	100	776	658	1,564
Loans and advances to other banks	-	-	-	16	-	16
Loans and advances to customers	-	10	29	298	67	404
Financial assets at amortised cost before credit loss allowances	1,715	1,567	4,717	21,036	21,418	50,453
Debt securities	-	143	461	2,469	4,966	8,039
Loans and advances to other banks	1,687	-	-	-	544	2,231
Loans and advances to customers	28	1,424	4,256	18,567	15,908	40,183
Total of financial assets	**3,106**	**1,749**	**4,910**	**22,347**	**22,623**	**54,735**
Financial liabilities at amortised cost	2,193	2,552	7,174	19,485	19,310	50,714
Liabilities to other banks	899	34	88	2,175	671	3,867
Thereof: registered securities	-	30	57	109	345	541
Liabilities to customers	1,280	1,035	2,536	5,846	14,204	24,901
Thereof: registered securities	-	382	567	2,868	13,354	17,171
Bearer bonds	14	1,461	4,550	11,399	3,813	21,237
Subordinated liabilities	-	22	-	65	622	709
Total of financial liabilities	**2,193**	**2,552**	**7,174**	**19,485**	**19,310**	**50,714**

64 Equity

Subscribed capital equals the maximum liability of the shareholder for the liabilities of the corporation to its creditors. The subscribed capital as of 31 December 2019 and during the entire financial year 2019 amounted to €380,376,059.67 which is divided into 134,475,308 ordinary bearer shares with no par value representing a theoretical interest in the share capital of approximately €2.83 per share. In the fiscal years 2019 and 2018, pbb did not hold any treasury shares.

Please refer to the disclosures pursuant to section 315a (1) HGB included in the "Supplemental Information" section of the Combined Management Report for information on authorised and contingent capital.

Additional paid-in capital includes contributions from a previous financial year as well as premiums from the issue of shares; except for an amount of €25,383,131.91 (31 December 2018: €25,383,131.91) the additional paid-in capital is freely available pursuant to section 272 (2) no. 4 HGB. Retained earnings were generally created only from net income of the current financial year or previous periods including the current consoliated profit.

Accumulated other comprehensive income from pension commitments decreased by €26 million. This increase was due to the lower discount rate applied to measure defined benefit pension obligations, from 2.02% as at year-end 2019 to 1.30%, and a higher rate of increase in pension obligations from 1.50% to 1.75%. Items that may be reclassified to profit or loss consisting of gains/losses on cash flow hedge accounting and from financial instruments at fair value through other comprehensive income burdened accumulated other comprehensive income by €22 million in total compared to 31 December 2018.

In June 2019, pbb distributed dividends of €134 million (or €1.00 per share) to shareholders.

The additional equity instruments include Additional Tier 1 (AT1) capital in the total nominal amount of €300 million less transaction costs of €2 million. AT1 capital qualifies as equity because there is no obligation to repay, or to make debt servicing payments on an ongoing basis. The bond issued by pbb on 12 April 2018 carries an initial coupon of 5.75% and has no final maturity. There are certain conditions attached to the coupon payments. The coupon on the AT1-capital of €18 million payed in April 2019 reduced retained earnings and is disclosed separately in the statement of changes in equity.

At the Annual General Meeting on 28 May 2020, the Management Board and the Supervisory Board will propose to distribute a dividend of €0.90 per dividend bearing share.

65 Trust business

As at 31 December 2019 and 31 December 2018, there were no trust assets or liabilities reported in the statement of financial position.

NOTES TO THE STATEMENT OF CASH FLOWS

66 Disclosures to the items in the statement of cash flows

The consolidated statement of cash flows shows the cash flows of the financial year broken down by operating activities, investing activities and financing activities. Cash and cash equivalents correspond to the balance sheet item cash reserve, and include cash in hand and credit balances at central banks.

Operating activities are defined broadly, and correspond to operating result. Cash flow from operating activities includes payments (inflows and outflows) attributable financial assets at fair value through profit or loss/positive fair values of hedging derivatives, financial assets at fair value through other comprehensive income, financial assets at amortised cost and other assets. Inflows and outflows attributable to financial liabilities measured at fair value through profit or loss/negative fair values from hedging derivatives, liabilities measured at amortised cost (without inflows/outflows from subordinated liabilities) and other liabilities are also included under operating activities. The interest and dividend payments resulting from operating activities are shown under cash flow from operating activities. This also relates to cash flows frum subordinated liabilities. In addition, payments for the interest portion of lease liabilities as well as short-term lease contracts with a maturity of less than 12 months are part of the cash flow from operating activities.

Cash flow from investing activities comprises payments for investment and security holdings as well as for tangible and intangible assets. In the financial years 2019 and 2018, no subsidiaries were disposed.

Cash flow from financing activities comprises inflows from capital increases, payments into reserves and silent participations, inflows and outflows for subordinated capital as well as payments for the amortisation part of lease liabilities.

Liabilities development from financing activities

in € million	2019	2018
Subordinated liabilities		
Balance at 1.1.	**709**	**1,002**
changes from financing cash flows	-5	-281
Other changes	-1	-12
Balance at 31.12.	**703**	**709**

NOTES TO DERIVATIVE TRANSACTIONS AND HEDGED ITEMS IN HEDGE ACCOUNTING

Risks are the possibilities to deviate from the planned future targets resulting from unpredictability of the future and disruptions. Interest rate risks and foreign exchange risks are primarily relevant for pbb Group. These arise from open positions for example in the case of mismatches of maturities or the variability respectively fixing of interest rates. Interest rate risks are accounted in hedge accounting. Other risks of the hedged items like for example credit risk or foreign exchange risk are not accounted in hedge accounting but are controlled bank wide.

Generally pbb Group hedges interest rate risks. However, in individual cases this may not be possible or sensible. The hedge ratio is determined in relation to the expectation for example of the interest rate development or the costs of hedging. If the risk is not hedged completely for example because the interest rate of the underlying asset does not match completely with the interest rate of the hedging instrument hedge ineffectiveness may arise. A further source of ineffectiveness may be different credit risks of the counterparties of the hedged item and hedging instrument.

pbb Group uses IASB's issuance "Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7" from September 2019 for the assessment of the retrospective and prospective effectiveness of hedge relationships. According to the changes accounting hedge relationships principally can be continued respectively further designated despite of the expected effects from the IBOR reform.

Hedging relationships between financial instruments are classified as a fair value hedge, a cash flow hedge or hedge of a net investment in a foreign operation in accordance with IAS 39. Hedging instruments used to hedge interest rate risks are mainly interest rate derivatives, for example interest rate swaps and interest rate options.

Specific disclosures required by IFRS 7 are shown in the risk and opportunity report, amongst others about credit risk, market risk and liquidity risk.

Fair Value Hedge Accounting Under IAS 39, with a fair value hedge, a recognised asset, a recognised liability, offbalance-sheet fixed obligation or a precisely designated part of such an asset, liability or obligation, is hedged against the risk of a change in fair value which is attributable to a specific risk and possibly has an effect on profit or loss for the period.

If the hedge of the fair value in the course of the reporting period meets the criteria of IAS 39.88, the hedge is accounted as follows:
> The profit or loss arising when the hedging instrument is remeasured at fair value (for a derivative hedging instrument) or the currency component of its carrying amount measured in accor-dance with IAS 21 (for non-derivative hedging instruments) is recognised in profit or loss for the period and
> The carrying amount of a hedged item is adjusted affecting profit or loss by the profit or loss arising from the hedged item and attributable to the hedged risks. This is applicable if the hedged item is otherwise measured at cost. The profit or loss attributable to the hedged risk is recognised in profit or loss for the period if the hedged item is an a financial asset measured at fair value through other comprehensive income. The amortisation of the hedge adjustment is started on the date of the revoking of the hedge relationship.

pbb Group uses fair value hedge accounting for accounting micro-hedge and macro-hedge relationships.

Interest rate risks are hedged under micro fair value hedge accounting. Any ineffectiveness within the permissible range pursuant to IAS 39 is reported under net income from hedging relationships. Positive and negative market values of hedging instruments are reported at fair value in positive fair value of hedge accounting derivatives or negative fair values of hedge accounting derivatives, respectively. The adjustment of the hedged item's carrying amount by the profit or loss attributable to the hedged risk directly affects the hedged item. The retrospective effectiveness test is conducted using the regression analysis. The dollar-offset method is used to quantify prospective ineffectiveness. If the hedge relationship is terminated for reasons other than the derecognition of the hedged item, the difference between the carrying amount of the hedged item at that point and the value at which it would have been carried, had the hedge never existed (the unamortised fair value adjustment), is amortised through profit or loss over the remaining term of the original hedge and recognised in net interest income. If the hedged item is derecognised, e. g. due to disposal or repayment, the unamortised fair value adjustment is recognised immediately in profit or loss.

In the context of portfolio hedge accounting within the meaning of IAS 39, interest rate risks from loans and advances as well as from liabilities are hedged on a portfolio basis. The portfolio hedge accounting is aimed to account the effects from the macro interest steering for hedged positions. The fair values as regards the hedged risks in the hedged cash flows of the portfolios of hedged items are reported either on the assets or on the liabilities side as valuation adjustments from portfolio hedge accounting. The changes in the fair value of hedged risks from the portfolios of hedged items are recognised in net income from hedging relationships. The market values of hedging instruments are recognised in statement of financial position at fair value in positive fair values of hedge accounting derivatives or negative fair values of hedge accounting derivatives, respectively. The changes in value are shown in net income from hedging relationships, thus largely compensating the effect on profit or loss from the valuation of the cash flows from the portfolios of hedged items. The cash flows from the portfolios of hedged items are determined monthly within the framework of a dynamic hedge designation and discontinuation process. The resulting valuation adjustments are amortised over the remaining term of the time band and recognised in net interest income. In case of a derecognition of cash flows of hedged items from the portfolio of hedged items, the associated valuation adjustment is reversed on a pro-rata basis and recognised in net interest income.

Cashflow Hedge Accounting According to IAS 39, a cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with the recognised asset or liability (for instance some or all future interest payments on variable-interest debt) or a highly probable forecast transaction that could affect profit or loss.

Under cash flow hedge accounting, hedging instruments are measured at fair value. The measurement result has to be broken down into an effective and an ineffective portion of the hedge relationship. As at 31 December 2019, and 31 December 2018, pbb Group did not designate any derivatives to cash flow hedges. The cash flow hedge reserve remaining from designations will be reversed in line with the hedged cash flows from underlying transactions. pbb applies a prospective effectiveness test every quarter. In case ineffectiveness is discovered, the cash flow hedge reserve is reversed through profit or loss.

67 Derivative transactions

In order to minimize (reduce) both the economic and the regulatory credit risk, bilateral netting agreements have been concluded. By means of such netting agreements, the positive and negative fair values of the derivatives contracts included under the master agreement can be offset against one another, and the future regulatory risk add-ons for these products can be reduced. Through this netting process, the credit risk is limited to a single net claim on the party to the contract.

For both regulatory reports and the internal measurement and monitoring of the credit commitments, such risk-reducing techniques are utilised only if they are considered to be enforceable under the respective legal system in the event that the business associate becomes insolvent. Legal advice is taken in order to check enforceability.

Similar to the master agreements, pbb Group concludes collateral agreements with its business associates to collateralise the net claim or liability remaining after netting (obtained or pledged collateral). Usually, this colalteral management reduces credit risk by means of prompt measurement and adjustment of the exposure to the customers.

Volume of derivatives as of 31 December 2019	Nominal amount				Fair value/carrying amount		
	Remaining maturities						
in € million	up to 1 year	more than 1 to 5 years	more than 5 years	**Total**	positive	negative	Fair value change for effectiveness calculation
Stand-alone derivatives[1]	**7,240**	**9,397**	**3,406**	**20,043**	**717**	**762**	
Interest rate derivatives	3,622	8,743	3,393	15,758	688	726	
OTC derivatives	3,622	8,743	3,393	15,758	688	726	
Interest rate swaps	823	4,546	3,331	8,700	686	724	
Interest rate options	2,799	4,197	62	7,058	2	2	
Currency derivatives	3,383	–	–	3,383	20	28	
OTC derivatives	3,383	–	–	3,383	20	28	
Forward currency transactions	3,383	–	–	3,383	20	28	
Other derivatives	235	654	13	902	9	8	
Cross currency basis swaps	235	654	13	902	9	8	
Derivatives in fair value hedge accounting[2][3]	**8,325**	**18,675**	**25,663**	**52,663**	**2,199**	**2,562**	**–127**
Interest rate derivatives	8,325	18,675	25,372	52,372	2,197	2,517	–124
OTC derivatives	8,325	18,675	25,372	52,372	2,197	2,517	–124
Interest rate swaps	8,312	17,468	24,131	49,911	2,197	2,479	–107
Interest rate options	13	1,207	1,241	2,461	–	38	–17
Other derivatives	–	–	291	291	2	45	–3
Cross currency basis swaps	–	–	291	291	2	45	–3

[1] In statement of financial position disclosed under “Financial assets at fair value through profit or loss” respectively “Financial liabilities at fair value through profit or loss”.
[2] In statement of financial position disclosed under “Positive fair values of hedge accounting derivatives” respectively “Negative fair values of hedge accounting derivatives”.
[3] Including Eurex AG balance after derivatives netting and cash collaterals independent from their use.

Volume of derivatives as of 31 December 2018				Nominal amount	Fair value/carrying amount		
	Remaining maturities						Fair value change for effectiveness calculation
in € million	up to 1 year	more than 1 to 5 years	more than 5 years	**Total**	positive	negative	
Stand-alone derivatives[1]	**6,959**	**12,221**	**3,825**	**23,005**	**749**	**881**	
Interest rate derivatives	3,337	11,559	3,778	18,674	713	860	
OTC derivatives	3,337	11,559	3,778	18,674	713	860	
Interest rate swaps	2,107	5,275	3,564	10,946	707	854	
Interest rate options	1,230	6,284	214	7,728	6	6	
Currency derivatives	2,951	–	–	2,951	23	8	
OTC derivatives	2,951	–	–	2,951	23	8	
Forward currency transactions	2,951	–	–	2,951	23	8	
Other derivatives	671	662	47	1,380	13	13	
Cross currency basis swaps	671	662	47	1,380	13	13	
Derivatives in fair value hedge accounting[2)3)]	**7,232**	**21,340**	**26,132**	**54,704**	**2,207**	**2,538**	**–77**
Interest rate derivatives	7,232	21,340	25,851	54,423	2,204	2,502	–71
OTC derivatives	7,232	21,340	25,851	54,423	2,204	2,502	–71
Interest rate swaps	7,232	20,688	24,425	52,345	2,204	2,476	–65
Interest rate options	–	652	1,426	2,078	–	26	–6
Other derivatives	–	–	281	281	3	36	–6
Cross currency basis swaps	–	–	281	281	3	36	–6

1) In statement of financial position disclosed under “Financial assets at fair value through profit or loss” respectively “Financial liabilities at fair value through profit or loss”.
2) In statement of financial position disclosed under “Positive fair values of hedge accounting derivatives” respectively “Negative fair values of hedge accounting derivatives”.
3) Including Eurex AG balance after derivatives netting and cash collaterals independent from their use.

The analysis of the remaining maturities as of 31 December 2018 was corrected according to IAS 8.42 (see note “Consistency”).

The fair value change for the effectiveness test of derivatives in portfolio hedge accounting that were netted against Eurex AG amounted to €55 million in 2019 and resulted from interest rate derivatives/interest rate swaps (201: €21 million from interest rate derivatives/interest rate swaps).

Counterparties	**31.12.2019**		**31.12.2018**	
	Fair value		Fair value	
in € million	positiv	negativ	positiv	negativ
Central governments and central banks of OECD member states	262	26	250	25
OECD banks	2,509	3,191	2,583	3,234
OECD financial institutions	50	103	42	147
Other companies and private individuals	95	4	81	13
Total	**2,916**	**3,324**	**2,956**	**3,419**

The reserve for cash flow hedge accounting, where derivatives were no longer designated in the financial years 2019 and 2018, amounted to €-11 million (31 December 2017: €0 million) after deferred taxes. In 2019, €– 16 million (2018: €– 31 million) before taxes was reclassified from the cash flow hedge reserve to net interest income.

68 Hedged items under Hedge Accounting

Hedged items under Hedge Accounting 31 December 2019

in € million	Micro fair value hedge					Potfolio hedge
		thereof:				
	Carrying amount	hedge adjustment included in carrying amount	hedge adjustment remaining after discontinuation of hedging relationship	Value change for the effectiveness test in the period	Valuation adjustment	Change for effectiveness calculation in reporting period
Financial assets at fair value through other comprehensive income	699	55	54	–8	–	–
Interest related hedge accounting	699	55	54	–8	–	–
Financial assets at amortised cost	17,915	2,052	1,448	–706	19	–20
Interest related hedge accounting	17,601	2,028	1,448	–703	19	–20
Currency related hedge accounting	314	24	–	–3	–	–
Financial liabilities measured at amortised cost	27,338	2,223	956	589	81	75
Interest related hedge accounting	27,338	2,223	956	589	81	75

Hedged items under Hedge Accounting 31 December 2018

in € million	Micro fair value hedge					Potfolio hedge
		thereof:				
	Carrying amount	hedge adjustment included in carrying amount	hedge adjustment remaining after discontinuation of hedging relationship	Value change for the effectiveness test in the period	Valuation adjustment	Change for effectiveness calculation in reporting period
Financial assets at fair value through other comprehensive income	892	50	72	–4	–	–
Interest related hedge accounting	892	50	72	–4	–	–
Financial assets at amortised cost	19,232	1,346	1,631	31	2	4
Interest related hedge accounting	18,933	1,326	1,631	25	2	4
Currency related hedge accounting	299	20	–	6	–	–
Financial liabilities measured at amortised cost	29,738	1,632	1,126	50	23	–26
Interest related hedge accounting	29,738	1,632	1,126	50	23	–26

The item “Valuation adjustment from portfolio hedge accounting (assets)” comprises fair values as regards the hedged risks in the hedged cash flows from the portfolios of hedged items (assets). The item “Valuation adjustment from portfolio hedge accounting (liabilities)” comprises fair values as regards the hedged risks in the hedged cash flows from the portfolios of hedged items (liabilities).

Ineffectiveness of the hedge[1)]

in € million	2019	2018
Result from micro fair value hedge accounting (interest rate risk)	-2	-
Result from portfolio hedge accounting (interest rate risk)	-	-1
Total		

[1)] Reported in net income from hedge accounting.

IBOR-Reform

Interbank offered rates (IBOR) are used as reference rates when determining the prices of numerous financial Instruments. Given the weaknesses of interbank rates used to date, which have become evident over recent years, legislators and regulatory authorities worldwide have been working on establishing a system of transaction-based risk-free reference interest rates. In the EU, this has been accomplished through the Benchmark Regulation (2016/1011 (EU) – “BMR”), which came into force on 1 January 2018. Specifically, IBOR rates are to be replaced by alternative reference rates – especially by risk-free overnight interest rates based on actual transactions, determined as an average rate for overnight interbank deposits. Since many of the changes involved are market-driven, there continues to be significant uncertainty surrounding the timing and the precise nature of the changes.

The replacement of existing IBOR reference rates from the end of 2021 onwards – as prescribed by the EU BMR – presents numerous challenges for pbb, affecting products as well as processes and systems. To meet these challenges, pbb launched a cross-divisional project for implementation of the IBOR reform back in 2018, and has taken numerous steps in order to be prepared for the IBOR changeover. The project team regularly reports to pbb's Management Board. Topics addressed by the project include finding fallback rules for discontinued reference rates, the changeover of LIBOR-based business, as well as operational issues. For instance, all new contracts pbb has entered into since 2019 which relate to a reference interest rate affected by the IBOR reform include a fallback provision that facilitates the swift changeover to a substitute reference rate preferred by regulators or established in the market. In some cases, fallback provisions for derivatives and financial liabilities were already agreed upon under framework or individual agreements. Moreover, pbb is monitoring the development of alternative reference rates discussed by supervisory authorities and market participants very closely indeed, in order to be able to assess the resulting impact upon pbb at an early stage. The Bank plans to uniformly convert the fair value discount curves used for the purposes of discounting and measurement, and in risk models, to the new risk-fee reference rates on a single record date in 2020, for all products across the Group.

The EURIBOR calculation methodology was revised in 2019: the European Money Markets Institute (EMMI), based in Belgium, has determined and disseminated EURIBOR reference rates since July 2019. Thanks to the BMR conformity of the revised EURIBOR reference rates, market participants (including pbb) will be able to use EURIBOR reference rates beyond 1 January 2020, for both existing and new contracts. pbb expects EURIBOR to remain available as a reference rate going forward. Given that the EURIBOR revision was purely methodological in nature, this change has not resulted in any material effects for pbb, neither for the valuation of financial instruments or hedge accounting, nor from a legal perspective.

The IASB has launched a two-phase project to address the potential impact of IBOR reform on financial reporting. Phase 1 of the project was concluded in September 2019, with the publication of an announcement. Communicated amendments to IFRS 9, IAS 39 and IFRS 7 grant a temporary exemption from applying specific hedge accounting requirements on hedges which are directly affected by the IBOR reform. According to the paper published by the IASB, despite the fact that hedge effectiveness will be impaired due to the expected replacement of the reference interest rates, hedges will nonetheless be permitted to be maintained or designated. The IASB amendments were endorsed by the EU on 16 January 2020; as a result, they entered into retrospective effect as at 1 January 2020. pbb Group has already applied the IASB publication "Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7" for the assessment of retrospective as well as prospective hedge effectiveness for the reporting period ending on 31 December 2019 on a voluntary basis. pbb Group plans to continue applying the IASB's phase 1 announcement until uncertainty concerning the timing and amount of underlying cash flows, as a result of the IBOR reform and the expected replacement of the various reference rates, has been removed.

Phase 2 of the IASB project on IBOR reform focuses on issues arising from the actual replacement of a reference interest rate by another (or a changed) reference interest rate, including the accounting treatment of any contractual amendments. The IASB commenced phase 2 discussions in September 2019.

As of the balance sheet date, the pbb Group had designated derivatives as hedging instruments to hedge interest rate risks (micro and macro fair value hedges) with the following reference interest rates on the variable swap ledges:

Notional volume of hedged items

in € million	Maturities up to 1 year	more than 1 year up to 5 years	more than 5 years	Total
EURIBOR (currency EUR)	3,405	11,261	18,502	33,168
LIBOR (currency GBP)	470	642	304	1,416
LIBOR (currency USD)	625	1,452	344	2,421
LIBOR (currency CHF)	-	485	149	634
LIBOR (currency JPY)	4	-	-	4
STIBOR (currency SEK)	503	1,198	-	1,701
CIBOR (currency DKK)	-	98	-	98

The above table also includes EURIBOR derivatives for the sake of completeness. pbb Group assumes that, due to their EU-BMR compliance, the EURIBOR interest rates will remain as reference rates until further notice. The above hedging instruments approximately reflect the interest rate risk of pbb Group managed by means of hedges.

As of the balance sheet date, pbb Group did not hold any swap transactions based on EONIA interest rates as a hedging instrument as part of a hedge in accordance with IAS 39.

OTHER NOTES TO THE FINANCIAL INTRUMENTS

69 Undiscounted cash flows of financial liabilities

Contractually agreed undiscounted cash flows of the financial liabilities according to IFRS 7.39

in € billion	31.12.2019	31.12.2018
Up to 3 months	4	3
From derivative financial instruments	-	-
From non-derivative financial instruments	4	3
More than 3 months to 1 year	5	8
From derivative financial instruments	-	-
From non-derivative financial instruments	5	8
More than 1year to 5 years	23	23
From derivative financial instruments	1	1
From non-derivative financial instruments	22	22
More than 5 years	23	26
From derivative financial instruments	2	2
From non-derivative financial instruments	21	24
Total	**55**	**60**

The undiscounted cash flows are presented in accordance with the contractually maturity, meaning that options or termination rights are not taken into account. This presentation does not reflect the economic management which is based on expected cash flows. The liquidity risk strategy and management of pbb Group is described in the Risk and Opportunity Report.

70 Assets assigned or pledged as collateral

Assets (without cash collaterals) have been pledged as collateral for the following liabilities and received collaterals:

Liabilities

in € million	31.12.2019	31.12.2018
Financial liabilities measured at amortised cost	2,212	2,228
Total	**2,212**	**2,228**

The following assets were pledged as collateral for the aforementioned liabilities:

Assets pledged

in € million	31.12.2019	31.12.2018
Financial assets at fair value through other comprehensive income	325	370
Financial assets at amortised cost	2,093	2,026
Total	**2,418**	**2,396**

The assets pledged mainly resulted from repurchase agreements. The transactions were carried out at the normal standard terms for repurchase transactions and concluded on an arm's-length basis.

In addition, cash collateral was provided in a total amount of €25 million (31 December 2018: €20 million) for the irrevocable payment obligations to the German Federal Agency for Financial Market Stabilisation (Finanzmarktstabilisierungsanstalt – "FMSA") resulting from the bank levy, and to the deposit guarantee scheme of German banks.

71 Collaterals permitted to resell or repledge

As of 31 December 2019 and as of 31 December 2018 there were no collaterals that may be resold or repledged in the absence of default.

72 Transfer of financial assets

When pbb Group transfers financial assets that do not qualify for derecognition (see also Note "Financial Instruments"), they continue to be reported in the statement of financial position.

Transfer of financial assets as of 31 December 2019

	Transferred financial assets that are not derecognised in their entirety			
	Transferred assets		Corresponding liabilities	
in € million	**Carrying amounts**	thereof: Repo transactions	**Carrying amounts**	thereof: Repo transactions
Financial assets at fair value through other comprehensive income	325	325	257	257
Debt securities	325	325	257	257
Financial assets at amortised cost	2,093	1,782	1,955	1,645
Debt securities	1,782	1,782	1,645	1,645
Loans and advances to customers	311	-	310	-
Total	**2,418**	**2,107**	**2,212**	**1,902**

Transfer of financial assets as of 31 December 2018	Transferred financial assets that are not derecognised in their entirety			
	Transferred assets		Corresponding liabilities	
in € million	**Carrying amounts**	thereof: Repo transactions	**Carrying amounts**	thereof: Repo transactions
Financial assets at fair value through other comprehensive income	370	370	339	339
Debt securities	370	370	339	339
Financial assets at amortised cost	2,026	1,684	1,889	1,547
Debt securities	1,684	1,684	1,547	1,547
Loans and advances to customers	342	-	342	-
Total	**2,396**	**2,054**	**2,228**	**1,886**

At balance sheet date the fair value of financial assets at amortised cost amounted to €2,090 million (31 December 2018: €1,989 million). The fair value of the corresponding liabilities amounted to €1,977 million (31 December 2018: €1,878 million). The net position from the fair values of assets and liabilities amounted to €113 million (31 December 2018: €111 million). pbb Group does not derecognise these financial assets, since not substantially all risks (in particular credit risk) and rewards of ownership are transferred.

In addition, securities with a carrying amount of €66 million (31 December 2018: €125 million) were transferred to Eurex as a collateral for clearing fund contribution and initial margin for derivative transactions.

pbb Group generally has no countinuing involvement in transferred and derecognised financial assets.

73 Fair values of financial instruments

The fair value of financial instruments, in the opinion of pbb Group, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (exit price). The fair values were determined as of the balance sheet date based on the market information available and on valuation methods described here.

All financial assets and liabilities that are measured at fair value are grouped into the three fair value hierarchies by pbb Group. Reclassifications within the fair value hierarchy are made at the end of the reporting period. The three-level hierarchy is based on the degree to which the input for the fair value measurement is observable:

> Level 1 – quoted priced (unadjusted) in active markets for identical financial assets or financial liabilities (market prices)
> Level 2 – inputs that are observable either directly or indirectly, other than quoted prices included within Level 1
> Level 3 – valuation techniques that include inputs that are not based on observable market data (unobservable inputs)

Fair values and fair value hierarchy of financial instruments

in € million	Carrying amount	Fair value	Level 1	Level 2	Level 3
	31.12.2019				
					Fair value
Assets in the scope of IFRS 13	**56,585**	**58,009**	**7,871**	**20,206**	**29,932**
Measured at fair value in the statement of financial position	5,201	5,201	1,221	3,540	440
Financial assets at fair value through profit or loss	1,306	1,306	3	971	332
Positive fair values of stand-alone derivatives	717	717	–	717	–
Debt securities	130	130	–	87	43
Loans and advances	456	456	–	167	289
Shares in investment funds qualified as debt instruments	3	3	3	–	–
Financial assets at fair value through other comprehensive income	1,696	1,696	1,218	370	108
Debt securities	1,325	1,325	1,218	1	106
Loans and advances	371	371	–	369	2
Positive fair values of hedge accounting derivatives	2,199	2,199	–	2,199	–
Not measured at fair value in the statement of financial position	51,384	52,808	6,650	16,666	29,492
Cash reserve	1,141	1,141	1,141	–	–
Financial assets at amortised cost [1]	50,224	51,667	5,509	16,666	29,492
Debt securities	7,676	7,777	3,709	3,029	1,039
Loans and advances	42,548	43,890	1,800	13,637	28,453
thereof: Claims from finance lease arrangements	208	216	–	216	–
Valuation adjustment from porfolio hedge accounting (assets)	19	–	–	–	–
Liabilities in the scope of IFRS 13	**53,146**	**54,253**	**19,603**	**27,574**	**7,076**
Measured at fair value in the statement of financial position	3,324	3,324	–	3,311	13
Financial liabilities at fair value through profit or loss	762	762	–	749	13
Negative fair values of stand-alone derivatives	762	762	–	749	13
Negative fair values of hedge accounting derivatives	2,562	2,562	–	2,562	–
Not measured at fair value in the statement of financial position	49,822	50,929	19,603	24,263	7,063
Financial liabilities measured at amortised cost	49,741	50,929	19,603	24,263	7,063
Liabilities to other banks	4,195	4,240	1,052	1,233	1,955
Liabilities to customers	23,985	24,785	238	19,805	4,742
Bearer bonds	20,858	21,157	17,828	3,225	104
Subordinated liabilities	703	747	485	–	262
Valuation adjustment from porfolio hedge accounting (liabilities)	81	–	–	–	–

[1] Less credit loss allowances.

Fair values and fair value hierarchy of financial instruments

in € million	Carrying amount	Fair value	Level 1	Level 2	Level 3
					31.12.2018
					Fair Value
Assets in the scope of IFRS 13	**57,581**	**58,868**	**8,181**	**20,071**	**30,616**
Measured at fair value in the statement of financial position	5,850	5,850	1,328	3,896	626
Financial assets at fair value through profit or loss	1,659	1,659	11	1,178	470
Positive fair values of stand-alone derivatives	749	749	–	749	–
Debt securities	258	258	8	214	36
Loans and advances	649	649	–	215	434
Shares in investment funds qualified as debt instruments	3	3	3	–	–
Financial assets at fair value through other comprehensive income	1,984	1,984	1,317	511	156
Debt securities	1,564	1,564	1,317	93	154
Loans and advances	420	420	–	418	2
Positive fair values of hedge accounting derivatives	2,207	2,207	–	2,207	–
Not measured at fair value in the statement of financial position	51,731	53,018	6,853	16,175	29,990
Cash reserve	1,388	1,388	1,388	–	–
Financial assets at amortised cost [1]	50,341	51,630	5,465	16,175	29,990
Debt securities	8,035	8,029	3,833	2,939	1,257
Loans and advances	42,306	43,601	1,632	13,236	28,733
thereof: Claims from finance lease arrangements	212	220	–	220	–
Valuation adjustment from porfolio hedge accounting (assets)	2	–	–	–	–
Liabilities in the scope of IFRS 13	**54,156**	**54,976**	**19,772**	**4,970**	**30,234**
Measured at fair value in the statement of financial position	3,419	3,419	–	3,404	15
Financial liabilities at fair value through profit or loss	881	881	–	866	15
Negative fair values of stand-alone derivatives	881	881	–	866	15
Negative fair values of hedge accounting derivatives	2,538	2,538	–	2,538	–
Not measured at fair value in the statement of financial position	50,737	51,557	19,772	1,566	30,219
Financial liabilities measured at amortised cost	50,714	51,557	19,772	1,566	30,219
Liabilities to other banks	3,867	3,875	899	–	2,976
Liabilities to customers	24,901	25,577	222	1	25,354
Bearer bonds	21,237	21,385	18,134	1,529	1,722
Subordinated liabilities	709	720	517	36	167
Valuation adjustment from porfolio hedge accounting (liabilities)	23	–	–	–	–

[1] Less credit loss allowances.

According to the general principles of IFRS 13 concerning fair value measurement techniques, an entity shall, in all cases, maximise the use of relevant observable inputs and minimise the use of unobservable inputs. All financial assets and liabilities measured at fair value are assigned to one level of the fair value hierarchy, depending on the respective inputs used.

Effective 30 June 2019, after carrying out regular reviews of the measurement techniques, pbb Group determined that the unobservable inputs used to measure financial liabilities with a fair value of €22.9 billion (1 January 2019: €21.9 billion) were no longer necessary, and thus not used anymore. This adjustment led to the reclassification of financial liabilities measured at amortised cost from level 3 to level 2 of the fair value hierarchy.

Disclosures to the measurement methods and input parameters

Measurement Process Both the Finance and the Risk Management & Control divisions play a role in the measurement process. The Finance division supplies accounting data. This includes:

> identification data, such as business identification numbers or International Securities Identification Numbers (ISINs)
> static data such as notional amounts, name and country of the counterparty and (remaining) terms
> accounting data such as carrying amounts, accruals and the effects of hedge accounting

Risk Management & Control calculates additional data used to measure fair value such as interest rates, credit spreads and market prices, as well as internal ratings and LGDs for certain financial instruments.).

Risk Management & Control uses the determined input parameters to calculate (and provide to Finance) the fair value or measurement price of financial instruments based on accepted and validated measurement methods. Finance consolidates the data received from Risk Management & Control with the data held for accounting and reporting purposes, and verifies completeness.

Level 2 instruments measured at fair value as of 31.12.2019

Measurement methods	Observable parameter
DCF methods	Euro zone inflation rates
(discounted cash flow)	Reference interest rates
	Saisonalities of Euro zone inflation rates
	Spot market exchange rates
	Yield curves
Option pricing models	Cap volatilities
	CMS spread options (strike price)
	CMS spread options (option price)
	Euro zone inflation rates
	Reference interest rates
	Saisonalities of Euro zone inflation rates
	Swaption volatilities
	Spot market exchange rates
	Exchange rates volatilities
	Yield curves

Level 3 instruments measured at fair value as of 31.12.2019

Measurement methods	Non-observable parameters	Observable parameter
DCF methods	Historical index/index correlations	+/-25% of the correlations
	Historical index/ exchange rate correlations	+/-25% of the correlations
	PD/LGD model spread	+/-2 rating levels for PD; +/-0,1 for LGD
Proxy model	Proxy models	+/- triple standard deviation

Financial instruments not measured at fair falue as of 31.12.2019

Measurement methods	Observable parameter (level 2)	Non-observable parameter (level 3)
DCF-Methoden	(Own) credit spreads and Liqui-AddOns, if necessary	Internal rating classes
	Reference interest rates	Recovery rates
	Risk-free interest rate	Estimated remaining maturities
	Observable future cash flows	Estimated future cash flows
	Benchmark interest rates	(Own) credit spreads (secondary market grid)
Bachelier cap-floor model (for floored plain vanilla floater)	Additional cap volatilities including smile	Additional cap volatilities including smile
Bachelier cap-floor model (for fixed coupons options)	Additional swaption volatilities including smile	Additional cap volatilities including smile
Prices on non-active markets	Prices of proxy trades	-

Sensitivities

The calculation of sensitivity is based on shock scenarios for correlations and volatilities pursuant to the level 3 measurement methods table. These amounts were calculated independently from each other.

However, for a receivable with a EUR/GBP quanto structure, there were correlations between the unobservable input parameters used (EUR-GBP interest or interest/EUR-GBP FX correlations). This is also the case for the associated derivative that hedges the asset from an economic perspective. The fair value of the asset (+/-€28 million) and the associated derivative (+/-€28 million) are offset by each other.

Alongside this, FVOCI securities are valued using a proxy approach. Changes in input parameters resulted in a difference of €+3 million and €-3 million, respectively. FVOCI receivables and FVPL securities are also measured using a proxy approach. In the alternative scenario, there were slight changes (+/- less than €1 million).

Non-observable spreads in a PD (probability of default)/LGD (loss given default) model are used for the valuation of drawings intended for syndication. The changes in spreads result in a change in fair value of €+1 million and €-2 million, respectively.

Changes in level 3 instruments measured at fair value

in € million	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial liabilities at fair value through profit or loss
Balance at 1.1.2018	**304**	**225**	**17**
Profit or loss	-6	-53	-2
Additions (new business)	291	-	-
Disposals/repayments	-97	-16	-
Reclassifications in Level 3	36	-	-
Reclassifications out of Level 3	-58	-	-
Balance at 31.12.2018	**470**	**156**	**15**
Balance at 1.1.2019	**470**	**156**	**15**
Profit or loss	-3	-47	-2
Additions (new business)	161	-	-
Disposals/repayments	-339	-1	-
Reclassifications in Level 3	43	-	-
Balance at 31.12.2019	**332**	**108**	**13**

74 Restructured loans and advances

As of 31 December 2019, restructuring agreements mainly related to standstill agreements and to the discontinuation of contractual arrangements.

Restructured loans and advances 31.12.2019	Gross amounts of exposure with forbearance measures			Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions	
in € million	Performing exposures with forbearance measures	Non-performing exposures with forbearance measures	**Total**	Performing exposures with forbearance measures	Non-performing exposures with forbearance measures
Financial assets at fair value through profit or loss	-	26	26	-	-9
Financial assets at fair value through other comprehensive income	-	-	-	-	-
Financial assets at amortised cost	-	297	297	-	-31
Loan commitments	-	-	-	-	-

75 Netting of financial instruments

The following tables show the gross carrying amounts of recognised financial assets respectively liabilities, the gross carrying amounts of the items offset in the statement of financial position and the net amounts of the financial assets and liabilities recognised in the statement of financial position. They also show the rights of set-off that did not lead to an offsetting in the statement of financial position, the collateral received for financial assets, the collateral pledged for financial liabilities and the net amounts of financial assets and liabilities remaining following the application of the netting agreements and deduction of the collateral.

Gross carrying amounts of the items offset in the statement of financial position

On-balance sheet netting of derivatives which are settled through Eurex Clearing led to a reduction in total assets of €2.4 billion as at 31 December 2019 (31 December 2018: €1.7 billion).

Netting agreements

pbb Group routinely enters into standardised bilateral netting agreements in the derivatives business to minimise the legal risk as well as the economic and regulatory counterparty default risk. The national respectively international agreements used are the German, the French and the Spanish Master Agreement for Financial Futures and the ISDA Master Agreement issued by the International Swaps and Derivatives Association. The derivatives cannot be offset in the statement of financial position since their conditions are not identical (e. g. different terms or currency underlyings).

Collateral

In addition, pbb Group also enters into collateral agreements to hedge the net receivables and net liabilities arising following offsetting according to the netting agreements (collateral received or pledged). The collateral used is primarily cash collateral; however, securities are sometimes also used by way of title transfer. The collateral agreements likewise cannot be offset against the derivatives.

Netting of financial instruments as of 31.12.2019

in € billion	Gross carrying amounts of recognised financial assets/liabilities	Gross carrying amounts of the items offset in the statement of financial position	Net amounts presented in the statement of financial position	Rights of set-off that did not lead to an offsetting in the statement of financial position	Received respectively pledged collateral	Remaining net amount
Financial assets	**5.3**	**2.4**	**2.9**	**1.5**	**1.2**	**0.2**
Positive fair values of derivatives	5.3	2.4	2.9	1.5	1.2	0.2
Financial liabilities	**5.7**	**2.4**	**3.3**	**1.5**	**1.8**	**-**
Negative fair values of derivatives	5.7	2.4	3.3	1.5	1.8	-

Netting of financial instruments as of 31.12.2018

in € billion	Gross carrying amounts of recognised financial assets/liabilities	Gross carrying amounts of the items offset in the statement of financial position	Net amounts presented in the statement of financial position	Rights of set-off that did not lead to an offsetting in the statement of financial position	Received respectively pledged collateral	Remaining net amount
Financial assets	**4.7**	**1.7**	**3.0**	**1.7**	**1.0**	**0.3**
Positive fair values of derivatives	4.7	1.7	3.0	1.7	1.0	0.3
Financial liabilities	**5.1**	**1.7**	**3.4**	**1.7**	**1.7**	**-**
Negative fair values of derivatives	5.1	1.7	3.4	1.7	1.7	-

OTHER NOTES

76 Contingent liabilities and other commitments

Contingent liabilities and other commitments

in € million	31.12.2019	31.12.2018
Contingent liabilities	**191**	**76**
Guarantees and warranties	191	76
Other commitments	**4,175**	**4,731**
Irrevocable loan commitments	4,175	4,731
Commitments from bank levies	**25**	**20**
Collateral pledged[1]	25	20
Total	**4,391**	**4,827**

[1] Cash collateral was provided for the irrevocable payment obligations to the German Federal Agency for Financial Market Stabilisation (Finanzmarktstabilisierungsanstalt – "FMSA") resulting from the bank levy, and to the deposit guarantee scheme of German banks. Pbb Group is also obliged to make additional payments for the bank levy if requested.

For pbb Group irrevocable loan commitments form the largest part of other commitments. Irrevocable loan commitments comprise all commitments of a creditor which can grant a loan and advance at a later date and which can cause a credit risk. These are mainly credit commitments which are not fully drawn.

As at balance sheet date the fair value of contingent liabilities amounted to €191 million (31 December 2018: €76 million) and the fair value of irrevocable loan commitments to €4,253 million (31 December 2018: €4,750 million).

Contingent liabilities and other commitments represent the maximum default risk within the meaning of IFRS 7. pbb Group has a claim for reimbursement of expenses in case a contingent liability is utilised. There were no material contingent liabilities as at 31 December 2019 and 31 December 2018.

77 Leases

Upon first-time application (1 January 2019), pbb Group applied the modified retrospective transition rules permitted under IFRS 16. The comparable figures for the previous financial year were not adjusted.

Operate lease as a lessee

As a lessee, pbb Group currently exclusively recognises right-of-use assets referring to land and buildings used by pbb Group in line with IFRS 16. pbb Group entered all of its rental contracts on an arm's length basis. Some of these contracts contain renewal options potentially extending the lease term for several periods, price adjustment provisions in the form of stepped rents or index clauses, as well as early termination provisions. Regarding lease extension options, and early termination options, pbb Group took what is presently considered the most likely scenario into consideration. pbb Group measured lease liabilities at the corresponding lease payments, which were discounted with the incremental borrowing rate applicable to the respective liability.

IFRS 16 provides options to exclude leases with a lease term of 12 months or less, as well as low-value assets (defined with a threshold value of €5,000 at pbb Group) from the scope of application. pbb Group has applied these options: expenses for this kind of leases were recognised through profit or loss on a straight-line basis over the contractual term of the underlying asset. Such expenses were disclosed as other operating expenses, or administrative expenses if the payments referred to rental expenses for business premises.

pbb Group discloses right-of-use assets in 'tangible assets' (see 'tangible assets' note), while lease liabilities are disclosed under 'other liabilities' (see 'other liabilities' note). Depreciation of right-of-use assets is recognised in the note on 'net income from write-downs and write-ups of non-financial assets' (see respective note). Immaterial interest expenses resulting from lease liabilities are disclosed in 'net interest income'.

Regarding leases previously classified as operating leases in line with IAS 17, pbb Group recognised the lease liability in the amount of the present value of the lease payments outstanding at the date of initial application, discounted with the incremental borrowing rate applicable at the date of initial application. The corresponding right-of-use asset was recognised in the amount of the lease liability. Furthermore, pbb Group applied the option permitted under IFRS 16 to disclose as short-term items any and all leases with a remaining term of 12 months or less since the date of initial application of IFRS 16. Regarding such short-term leases, no adjustments were recognised at the date of initial application. Overall, pbb Group's statement of financial position was extended by €9 million as at 1 January 2019, while the first-time application of IFRS 16 did not incur any material cumulative effects in the Group's retained earnings.

In accordance with IAS 17, pbb Group disclosed the following minimum lease payments effective 31 December 2018:

Future minimum lease payments by maturities (IAS 17)

in € million	**31.12.2018**
up to 1 year	8
more than 1 year to 5 years	21
more than 5 years	10
Total	**39**

The following table shows the reconciliation of pbb Group's obligations from operating leases at 31 December 2018 (IAS 17) to the opening balance of lease liabilities recognised at 1 January 2019 (IFRS 16):

Reconciliation

in € million	
Operate lease liabilities as of 31.12.2018	**39**
Option to use for short term lease	2
Option to use for low value lease	-
Other	27
Gross Lease Liabilities as of 1.1.2019	10
Discounting	1
Lease liabilities as of 1.1.2019	**9**

The "others" item mainly comprises the rental agreement for pbb Group's business premises in Garching, Germany. This agreement was not disclosed under IAS 17, because it commenced only in July 2019, although it was legally effective at the 2018 reporting date.

The lease liabilities were discounted with pbb Group's incremental borrowing rate effective 1 January 2019. The weighted average interest rate was 0.41%.

For further information on the depreciation, additions or other adjustments made to right-of-use assets, please refer to the statement of changes in tangible assets as disclosed in the "tangible assets" note.

Contractual maturities of undiscounted cash flows from lease liabilities

in € million	31.12.2019
up to 1 year	5
more than 1 year to 5 years	19
more than 5 years	12
Total	**36**

Lease in the income statement

in € million	2019
Depreciation	3
Interest expense	-
Short term leases, less than 12 month	1
Total	**4**

Lease in the statement of cash flows

in € million	2019
Payments for short term leases, less than 12 month (Cash flow from operating activities)	1
Interest portion of lease liabilities payments (Cash flow from operating activities)	-
Repaymens portion of lease liabilities payments (Cash flow from financing activities)	3
Total	**4**

Finance lease as a lessor

Given that accounting rules for finance leases have hardly changed between IAS 17 and IFRS 16, pbb Group still recognises receivables from lessees.

Reconciliation

in € million	31.12.2019 (IFRS 16)	31.12.2018 (IAS 17)
Gross investment	**234**	**244**
Unearned finance income	-26	-32
Net investment/present value of minimum lease payments	**208**	**212**

Allocation by maturities

in € million	31.12.2019 (IFRS 16)	31.12.2018 (IAS17)
Gross investment	**234**	**244**
up to 1 year	15	16
more than 1 year to 2 years[1]	16	15
more than 2 years to 3 years[1]	16	16
more than 3 years to 4 years[1]	16	16
more than 4 years to 5 years[1]	16	16
more than 5 years	155	165
Present value of minimum lease payments	**208**	**212**
up to 1 year	12	12
more than 1 year to 2 years[1]	12	12
more than 2 years to 3 years[1]	13	12
more than 3 years to 4 years[1]	13	13
more than 4 years to 5 years[1]	14	13
more than 5 years	144	150

[1] Previous year the four values of those maturity bands were shown total at maturity band “1 year to 5 years“.

pbb Group's finance leases refer to the financing structure for an office building.

In the financial year under review and the previous financial year, pbb Group did not enter into any sale-and-leaseback transactions or third-party sublease agreements.

78 Key regulatory capital ratios

The Management Board manages the Group's capitalisation, based on regulatory capital ratios in accordance with the CRR and additional regulations announced by the ECB (Supervisory Review and Evaluation Process – "SREP").

Please refer to Risk and Opportunity Report for capitalisation management as well as for key regulatory capital ratios.

79 Group auditor's fee

Group auditor's fee

in € thousand	2019	2018
Audit	1,937	1,798
Other assurance services	228	252
Tax advisory services	-	-
Other non-audit services	2,135	53
Total	**4,300**	**2,103**

The auditors' fee for KPMG AG WPG Wirtschaftsprüfungsgesellschaft comprised – for the most part – the audit of the consolidated financial statements and the unconsolidated financial statements of pbb as well as the audit of financial statements prepared by different subsidiaries, including the extension of the audit assignment in line with the applicable legal requirements. In addition, audit reviews of interim financial statements were performed.

Other assurance services comprised the preparation of comfort letters in connection with bond issues, the audit of reporting obligations and code of conducts according to section 89 a securities trading act, limited assurance engagement for the summarised separate non-financial report of pbb, and other assurance services required by supervisory authorities.

Other non-audit services mainly comprised quality assurance services in connection with the credit risk models and recently introduced legal and regulatory requirements, as well as within the framework of the regulatory stress test which are unrelated to the introduction or implementation of internal control and risk management procedures.

KPMG AG Wirtschaftsprüfungsgesellschaft has been appointed as external auditor for the Annual and Consolidated Financial Statements of Deutsche Pfandbriefbank AG since the merger of Hypo Real Estate Bank AG and DEPFA Deutsche Pfandbriefbank AG to form Deutsche Pfandbriefbank AG in 2009. KPMG had already worked in the same function for predecessor institutions of Hypo Real Estate Bank AG. The financial statements were signed by German Public Auditors (Wirtschaftsprüfer) Mr Wiechens and, since the financial year 2012, Ms Schmidt. In the financial year 2015, the financial statements were signed by the German Public Auditors (Wirtschaftsprüfer) Messrs Mock and Haider. In the financial years 2016 to 2018, the financial statements were signed by the German Public Auditors (Wirtschaftsprüfer) Mr Winner and Mr Dielehner. The latter had already signed pbb's financial statements in 2009. For the financial year 2019, Messrs Winner and Dielehner are again intended to be the signing German Public Auditors (Wirtschaftsprüfer).

80 Related parties disclosures

According to IAS 24 (Related-Party Disclosures), a party is related to an entity if, directly or indirectly through one or more intermediaries, the party controls or is controlled by the reporting entity, has an interest in the entity that gives it significant influence over the entity or has joint control over the entity as well as associates and joint ventures. In addition, retirement benefit schemes for postemployment benefits for employees are also included under related parties.

Related Entities

According to pbb's knowledge, the share of the Federal Republic of Germany (indirectly via Finanzmarktstabilisierungsfonds – FMS) in pbb stood at 3.5% as at 31 December 2019 (31 December 2018: 3,5%). As a result, pbb Group no longer considers HRE Holding and all companies under the control, joint management or significant influence of the Federal Republic of Germany (as indirect shareholder of Finanzmarktstabilisierungsfonds – FMS and HRE Holding) to be related parties within the meaning of IAS 24.

At the reporting date, pbb Group had receivables to associates not accounted for using the equity method in the amount of €18 million (31 December 2018: €20 million); as in the previous year, there were no liabilities.

On 31 December 2019 liabilities to defined contribution plans amounted to less than €1 million (31 December 2018: less than €1 million).

Related Persons

pbb Group defines related persons as being the members of the Management Board and the Supervisory Board, plus pbb's second-level managers and members of senior management of pbb's subsidiaries, as well as close members of their families and affiliated enterprises.

Total remuneration of former members of the Management Board and their surviving dependants amounted to €4,758 thousand for 2019 (2018: €4,896 thousand). Remuneration for Supervisory Board members in office during the year under review totalled €783 thousand (2018: €690 thousand) during the year under review. This comprised exclusively fixed remuneration.

Vested remuneration claims of persons holding key positions within the Group (senior management)[1]

in € thousand	Short-term benefits	Post-employment benefits	Other long-term benefits	Termination benefits	Share-based payments	2019 Total	2018 Total
Total	**9,965**	**2,517**	**704**	**-**	**1,483**	**14,669**	**13,305**

[1] Reporting follows the "vesting principle", disclosing those remuneration components which were vested during the relevant 2019 reporting period.

Pension obligations to persons holding key positions within pbb Group (senior management)

in € thousand	31.12.2019	31.12.2018
Total[1]	**85,980**	**77,752**

[1] Including €59,212 thousand (2018: €57,812 thousand) for pensioners and their surviving dependants.

Disclosure by pbb pursuant to section 314 no. 6 of the HGB, by groups of individuals

Remuneration paid to Management Board members of pbb

in € thousand	2019[1] Remuneration	Total
Management Board members who were in office during the financial year 2019	3,070	3,070
Management Board members who retired prior to the financial year 2019	-	-
Total	**3,070**	**3,070**

[1] Remuneration paid to Management Board members who were in office during the financial year 2018 amounted to €2,341 thousand. Management Board members who retired prior the financial year 2018 did not receive any remuneration in 2018.

As of the balance sheet date, there were no receivables to related persons from loans or advances or other commitments.

Provisions for pensions

in € thousand	2019[1] Additions/ reversals	Total
Management Board members who were in office during the financial year 2019	3,966	11,040
Management Board members who retired prior to the financial year 2019	1,400	59,212
Total	**5,366**	**70,252**

[1] Provisions for pensions for Management Board members who were in office during the financial year 2018 amounted to €7,074 thousand. Provisions for pensions to Management Board members who were retired prior the financial year 2018 amounted to €57,812 thousand as of 31 December 2018.

Remuneration paid to Supervisory Board members of pbb

in € thousand	2019[1] Total fixed remuneration
Supervisory Board members who were in office during the financial year 2019	783
Supervisory Board members who retired prior to the financial year 2019	-
Total	**783**

[1] Remunerations based on employment contracts that employee representatives of the Supervisory Board receive additionally to their function in the Supervisory Board are not shown.
[2] Remuneration paid to Supervisory Board members who were in office during the financial year 2018 amounted to €690 thousand in the year 2018. Supervisory Board members who retired prior the financial year 2018 did not receive any remuneration in 2018.

The remuneration of the Management Board and the Supervisory Board members for their respective Board activities (including the corresponding tables) is disclosed in the Remuneration Report on an individual basis. Except for employee representatives to the Supervisory Board, who are remunerated by pbb under their individual employment contracts, the members of pbb's Supervisory Board did not receive any remuneration for personal services during 2019.

Statement according to article 19 MMV

According to pbb's knowledge, the members of the Management Board and the Supervisory Board as well as persons closely related to these members did not hold any shares of the Company in a reportable extent as at 31 December 2019 and as at 31 December 2018. In the years 2019 and 2018, according to pbb's knowledge, no pbb shares or derivatives relating to such shares in a reportable extend were acquired or sold by members of the Management Board and the Supervisory Board or by persons closely related to such members.

Amount of cash-settled share-based payment transactions

The total amount of outstanding virtual shares in relation to the share-based payment arrangements developed as follows:

Amount of cash-settled share-based payment transactions

Quantity (number)	2019	2018
Balance (outstanding) at 1.1.	139,700	59,090
granted during the reporting period	153,060	104,240
expired during the reporting period	-	-
exercised during the reporting period	54,651	23,630
Balance (outstanding) at 31.12.	238,109	139,700
of which: exercisable	-	-

The fair value of the virtual shares granted during the reporting period amounted to €2 million (2018: €1 million) as at the balance sheet date.

The virtual shares exercised during the reporting period were converted at a weighted average price of the pbb share of €10.11 (2018: €14.11).

The total amount expensed for share-based payment transactions during the financial year 2019 was €2 million (2018: €1 million). A detailed breakdown of the share in total expenses attributable to the members of the Management Board is included in the Remuneration Report.

An amount of €0 million (2018: €0 million) was expensed for former members of the Management Board.

The intrinsic value of the virtual shares exercisable at the reporting date amounted to €0 million (2018: €0 million), since there were no exercisable virtual shares at that date. The obligation from share-based payment transactions as at 31 December 2019 amounted to €3 million (2018: €1 million). It is reported in the statement of financial position under provisions.

81 Employees

Average number of employees

	2019	2018
Employees (excluding apprentices)	791	786
Thereof: senior staff in Germany	19	19
Total	**791**	**786**

82 Members of the Supervisory Board and of the Management Board

Supervisory Board of pbb in financial year 2019

Name Place of residence Function in Supervisory Board Initial Appointment	**Principal occupation** **Functions in the Committees of the Supervisory Board**	**Supervisory Board memberships and other directorships in 2019**
Dr Günther Bräunig Frankfurt/Main, Germany Chairman 14.8.2009	**CEO of KfW** Chairman of the Executive and Nomination Committee and of the Remunaration Committee, Member of the Audit Committee	**Deutsche Post AG, Bonn, Germany** – Member of the Supervisory Board **Deutsche Telekom AG, Bonn, Germany** – Member of the SupervisoryBoard
Dagmar Kollmann Vienna, Austria Deputy Chairman 14.8.2009	**Entrepreneur** Chairman of the Audit Committee and Member of the Executive and Nomination Committee and of the Remunaration Committee and of the RiskManagement and Liquidity Strategy Committee	**Deutsche Telekom AG, Bonn, Germany** – Member of the Supervisory Board **KfW IPEX-Bank GmbH, Frankfurt/Main, Germany** – Member of the Supervisory Board **Bank Gutmann AG, Vienna, Austria** – Member of the Supervisory Board (until 27.6.2019) **Unibail-Rodamco SE, Paris, France** – Member of the Supervisory Board **Coca-Cola European Partners plc, London, United Kingdom** – Member of the Supervisory Board (since 30.5.2019)
Dr Jutta Dönges Frankfurt/Main, Germany Member 21.06.2018	**Executing Director of Bundesrepublik Deutschland – Finanzagentur GmbH** Member of the Audit Committee and of the Risk Management and Liquidity Stragety Committee	**FMS Wertmanagement AöR, Munich, Germany** – Deputy Chairman of the Supervisory Board **Erste Abwicklungsanstalt AöR, Düsseldorf, Germany** – Member of the Supervisory Board (until 17.06.2019) **Eurex Clearing AG, Frankfurt/Main, Germany** – Member of the Supervisory Board
Dr Thomas Duhnkrack Kronberg/Taunus, Germany Member 21.7.2015	**Entrepreneur** Member of the Audit Committee	**Hauck & Aufhäuser Privatbankiers AG, Frankfurt/Main, Germany** – Member of the Supervisory Board
Dr. Christian Gebauer-Rochholz Hochheim, Germany Employee Representative 21.11.2012	**Bank employee**	-
Georg Kordick Poing, Germany Employee Representative 22.2.1990	**Bank employee**	-
Joachim Plesser Ratingen, Germany Member 26.8.2014	**Consultant** Chairman of the Risk Management and Liquidity Strategy Committee, Member of the Executive and Nomination Committee and of the Remunaration Committee	**Commerz Real Investmentgesellschaft mbH, Wiesbaden, Germany** – Member of the Supervisory Board **DIC Beteiligungs AG, Frankfurt/Main, Germany** – Member of the Supervisory Board **GEG German Estate Group AG, Frankfurt/Main, Germany** – Member of the Supervisory Board (unitl 2.4.2019) **Pandion AG, Cologne, Germany** – Chairman of the Supervisory Board
Oliver Puhl Frankfurt/Main, Germany Member 13.5.2016	**Entrepreneur** Member of the Risk Management and Liquidity Strategy Committee	-
Heike Theißing Munich, Germany Employee Representative 7.7.2011	**Bank employee** Member of the Remunaration Committee	-

Management Board of pbb in financial year 2019

Name and place of residence	**Function in the Management Board**	**Supervisory Board memberships**
Andreas Arndt Munich	CEO/CFO	-
Thomas Köntgen Frankfurt/Main	Deputy CEO Real Estate Finance Public Investment Finance	-
Andreas Schenk Dreieich	CRO	-
Marcus Schulte Grünwald	Treasury	-

83 Holdings of pbb

Holdings of pbb as of 31 December 31.12.2019

Additional statement according to HGB Name Place of business and country	Purpose of business	Interest in % Total (Sec 16 (4) Aktiengesetz)	Interest in % Of which held indirectly	Differing voting rights in %	Currency	Equity in thousands	Net income/ loss in thousands
Consolidated companies							
CAPVERIANT GmbH[1] Munich, Germany	Marketplace of municipal finance	100.00	-	-	EUR	7,138	-
Immo Immobilien Management Beteiligungsgesellschaft mbH i.L. Munich, Germany	Real estate company	100.00	-	-	EUR	5	-2
IMMO Invest Real Estate GmbH[1] Munich, Germany	Salvage acquisition	100.00	-	-	EUR	947	-
Associated companies not measured at equity due to minor significance							
SOMA Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Darmstadt KG [2] Dusseldorf, Germany	Model of bank holding	33.33	-	25.00%	EUR	-4,622	2,139

[1] Profit transfer by shareholders on the basis of profit and loss transfer agreement.
[2] Financial figures from the financial year 2018.

84 Country-by-Country Reporting

The requirements of Article 89 of EU Directive 2013/36/EU (Capital Requirements Directive CRD IV) concerning to so-called Country-by-Country Reporting were endorsed in German law by Section 26a KWG (German Banking Act). In financial years 2019 and 2018 no entity respectively no branch of pbb received public subsidies. On 31 December 2019, the ratio of net profit and total balance sheet of pbb Group was 0.3% (31 December 2018: 0.3%). The further figures required by Section 26a KWG are disclosed in the following table:

Country-by-Country Reporting (Additional statement according to Section 26a KWG) 31.12.2019

Type of business Name and place of business	Country	Number of employees[1]	Turnover[2) 3)] (in € million)	Income/loss before tax[3] (in € million)	Income taxes[3] (in € million)
Deposit taking credit institution					
Deutsche Pfandbriefbank AG, Munich	Germany	625	446	193	-34
Branch of a deposit taking credit institution		-	-	-	-
Deutsche Pfandbriefbank AG, London branch	United Kingdom	49	21	7	-1
Deutsche Pfandbriefbank AG, Madrid branch	Spain	10	3	-	-
Deutsche Pfandbriefbank AG, Paris branch	France	32	24	14	-
Deutsche Pfandbriefbank AG, Stockholm branch	Sweden	10	3	1	-
Representative office of a deposit taking credit institution					
Deutsche Pfandbriefbank AG, representative office New York	USA	9	4	1	-2
Provider of ancillary services					
CAPVERIANT GmbH, Munich	Germany	14	4	-	-
CAPVERIANT GmbH, Paris branch	France	3	1	-	-
Immo Immobilien Management Beteiligungsgesellschaft mbH i.L., Munich	Germany	-	-	-	-
IMMO Invest Real Estate GmbH, Munich	Germany	-	-	-	-

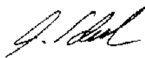
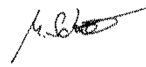
[1] Full-time equivalents not including apprentices, interns/working students and short-term employees with fixed terms < 1 year.
[2] Operating income as turnover equivalent.
[3] Figures before consolidation.

85 Report on Post-balance Sheet Date Events

There were no significant events after 31 December 2019.

Munich, 3 March 2020

Deutsche Pfandbriefbank AG
The Management Board

Andreas Arndt Thomas Köntgen Andreas Schenk Marcus Schulte

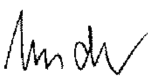
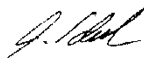
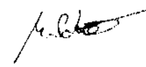
Responsibility Statement

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

Munich, 3 March 2020

Deutsche Pfandbriefbank AG

The Management Board

Andreas Arndt   Thomas Köntgen   Andreas Schenk   Marcus Schulte

Independent Auditor's Report

To Deutsche Pfandbriefbank AG, Munich

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE COMBINED MANAGEMENT REPORT

Opinions

We have audited the consolidated financial statements of Deutsche Pfandbriefbank AG, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the management report of Deutsche Pfandbriefbank AG and the Group (combined management report) for the financial year from 1 January to 31 December 2019. In accordance with German legal requirements, we have not audited the content of those components of the combined 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 consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019, and of its financial performance for the financial year from 1 January to 31 December 2019, and
> the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the content of those components of the combined management report specified in the "Other Information" section of the auditor's report.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2)(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 evidence we have obtained is sufficient and

appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Determination of stage 3 credit loss allowances in the Real Estate Finance segment
For the accounting policies and assumptions applied, please refer to the disclosures in the notes, section 7 "Financial Instruments" sub-section "Impairment" and section 29 "Judgements and estimations" sub-section "Allowances".

The Financial Statement Risk
One of the main requirements of the financial reporting standard IFRS 9 Financial Instruments is that the measurement of provisions for expected credit losses is generally based on probability-weighted scenarios and consequently this also applies to debt instruments with credit impairment (stage 3 impairment). In this context, the influence of macroeconomic factors on credit risk must also be taken into account. Deutsche Pfandbriefbank Group's lending operations almost exclusively consist of large-scale commercial real estate financing for which the Deutsche Pfandbriefbank Group determines risk provisions on a case-by-case basis.

As at 31 December 2019, Deutsche Pfandbriefbank Group's loan loss provisions to customers amounted to EUR 124 million (31 December 2018: EUR 107 million). Of this amount, EUR 55 million (31 December 2018: EUR 56 million) is attributable to stage 3 loan loss provisioning for the Real Estate Finance segment. This decline in stage 3 loan loss provisioning in the amount of EUR 1 million is due to reducing effects, which were more than offset by (net) changes in credit risk in the amount of EUR 33 million.

Determining the number and nature of scenarios, deriving the cash flows expected in each scenario and estimating the probabilities of occurrence require considerable judgement.

Therefore it was of particular importance for our audit that the number of scenarios considered was consistent with the complexity of the conditions determining the individual credit risks including the dependence on macroeconomic factors. We also considered it important that the selection of specific scenarios, estimates of probability for each scenario and estimates of cash flows expected in each scenario were verifiably, justifiably and consistently performed and documented.

Our Audit Approach

Based on our risk assessment and evaluation of the risks of material misstatement, we used both control-based and substantive audit procedures for our audit opinion. We therefore performed the following audit procedures, among others:

In a first step, we gained a better understanding of the performance of the credit portfolio, the associated credit risks and the internal control system with regard to identifying, controlling, monitoring and evaluating credit risks for the credit portfolio.

Our audit included system and compliance testing of the internal control system with particular focus on assessing the internal financial reporting approach with regard to measuring loans with a deterioration in credit quality and with regard to the number, derivation and evaluation of scenarios.

For the IT systems and individual data processing systems used, we first verified the effectiveness of rules and procedures relating to numerous IT applications and supporting the effectiveness of application controls, with the involvement of our IT experts.

Based on these findings, we also assessed, within the scope of our selection of credit exposures defined in accordance with risk and materiality criteria, whether the number and nature of the scenarios selected as well as the probabilities allocated to these scenarios were appropriate. In doing so, we took into account the complexity of financing in each case and the factors likely determining further exposure to risk and considered whether the assumptions underlying the scenarios were consistent with the forecasts of general macroeconomic conditions used at Deutsche Pfandbriefbank Group.

We then assessed the cash flows derived for the scenarios including the payment dates assumed. Our assessment included an evaluation of collateral depending on the exposure strategy pursued by the Deutsche Pfandbriefbank Group.

For the purposes of impairment-testing of the underlying collateral, we used appraisals from independent experts for our opinion as well as publicly available data to assess whether the assumptions used for the expert opinions were properly derived. We also confirmed the competence, professional skills and impartiality of the experts, particularly on the basis of interviews, inspection of their assignment, and publicly available information on the experts engaged.

Lastly, we verified that the value of expected credit losses was accurately calculated.

Our Observations

Based on our audit of a selection of credit exposures that were allocated to stage 3 risk provisioning in the Real Estate Finance segment, we found that the judgements in selecting specific scenarios, estimates of probability for each scenario and estimates of cash flows expected in each scenario were verifiably, justifiably and consistently performed and documented.

Other Information

Management and/or the Supervisory Board are/is responsible for the other information. The other information comprises the following parts of the combined management report, whose content was not audited:

- the corporate governance statement included in section "Corporate Governance Statement" of the combined management report, and
- information extraneous to management reports and marked as unaudited.

The other information also includes:

- the separate combined non-financial report, which is published with the combined management report, and
- the remaining parts of the annual report.

The other information does not include the consolidated financial statements, the combined management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is 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 Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined 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 opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on

the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

> Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
> Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
> Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
> Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management 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 opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the annual general meeting on 7 June 2019. We were engaged by the Chairperson of the Audit Committee of the Supervisory Board on 7 November 2019. We have been the group auditor of Deutsche Pfandbriefbank AG and its legal predecessors without interruption for more than 20 years.

We declare that the 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).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Andreas Dielehner.

Munich, 4 March 2020

KPMG AG
Wirtschaftsprüfungsgesellschaft

[signature] Winner	**[signature] Dielehner**
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Additional Information

Non-financial Report

Pursuant to sections 315b-c in connection with section 289b-e of the German Commercial Code (HGB), Deutsche Pfandbriefbank AG (pbb) has published this separate, combined non-financial report, prepared in line with the German Sustainability Code (DNK) and in accordance with the requirements of the German CSR Directive Implementation Act (CSR-Richtlinie-Umsetzungsgesetz).

SUSTAINABILITY STRATEGY

pbb is a leading specialist bank for commercial real estate finance and public investment finance in Europe and the US. As a financing partner for the real estate industry and the public sector, the Bank holds an important real economic and macroeconomic function. At the same time, pbb ranks amongst the largest issuers of Pfandbriefe (German covered bonds), and is thus also a key issuer of covered bonds in Europe. This way, pbb bundles funds for granting loans, and transforms illiquid loans with concentrated risks into investment opportunities with a diversified risk structure and a high degree of fungibility. For details on the Group structure, business model and business strategy, please refer to the section on Fundamental Information about the Group in pbb Group's Combined Management Report 2019.

When carrying out its business activities, pbb Group is responsible for its environment:
- Employees
- Clients and banking partners
- Equity and debt investors
- Service providers and suppliers
- Society and the environment.

Sustainability is our guiding principle. pbb Group defines sustainability as the self-conception, that its own actions provide an essential contribution to securing a long-term future and to consider the consequences for all stakeholders and the environment. pbb Group is convinced that law-abiding and honest conduct, responsible corporate governance, and adherence to high ethical principles are essential prerequisites for sustainability. pbb Group's aims to combine ongoing economic success with sustainability aspects in the best way possible, thereby creating long-term value for all stakeholders, establishing benefits to society, and protecting natural resources. Given ongoing changes of markets and stakeholder requirements, pbb Group deems a regular and open dialogue to be essential for identifying the needs of all stakeholder groups at an early stage, and being able to include these needs in decision-making processes.

For pbb Group, the active support of the development process towards sustainability is of special concern. That is why pbb Group's sustainability strategy is designed to continuously strengthen and extend sustainability awareness by implementing appropriate measures, as well as embedding sustainability aspects as an integral element within the company. The sustainability strategy focuses on aspects which, on the one hand, have a material impact on the Bank's business activities and business success, and which pbb Group, on the other hand, can significantly influence itself. Such relevant aspects are determined via a materiality analysis on an annual basis.

In 2018, the CSR Committee, which is pbb's prevailing body for advancing its sustainability strategy, decided to optimise pbb Group's sustainability strategy by taking into account the Sustainable Development Goals (SDGs) – with the goal to support sustainable growth, and thus to actively shape a successful future by creating a solid basis.

In a first step, the SDGs were prioritised and split into three groups: SDGs where pbb Group is able to make a strong positive contribution, SDGs where pbb Group is able to make a direct or indirect positive contribution and SDGs where pbb Group is able to avoid negative implications.

Against this background, four SDGs were identified to be relevant for the increase of the Group's contribution to sustainability: gender equality; industry, innovation and infrastructure; decent work and economic growth; sustainable cities and communities. These four SDGs are covered in more detail below:

Laying a solid foundation

To be able to deliver solid economic results in the long term, laying a strong foundation is paramount. Sustainable success needs thorough groundwork. That is why action is required to strengthen – and deepen – core areas of expertise. As regards the SDGs, pbb Group can make a strong positive contribution looking at gender equality, as well as industry, innovation and infrastructure.

5 Gender equality
In its Code of Conduct (published online at www.pfandbriefbank.com/en/unternehmen/corporate-responsibility.html), pbb Group has committed itself to respect all people, irrespective of age, sex, race, social background, skills, sexual orientation or religion, which is intrinsically linked with the principle of equal opportunity and thus with that of gender equality. This is being supported by an increased awareness across all levels, the establishment of a corresponding management and corporate culture, and the internal obligation to specifically address the under-represented gender for the given situation when filling vacant positions, whilst taking suitability and qualifications into account – a direct line to target 5 of goal 5:

Goal target 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

9 Industry, innovation and infrastructure
pbb Group makes quite a strong positive contribution to target 1 of goal 9 by providing funding for commercial real estate and public investment projects. Commercial Real Estate Finance is certainly about creating housing and office space, but it is also about fulfilling local everyday shopping needs. In Public Investment Finance, the focus is on public housing, utilities and waste management, healthcare and nursing care properties, as well as childcare and educational facilities.

The CAPVERIANT platform for municipal financing, a pbb subsidiary, supports the government in raising funding for modernising government infrastructure with a transparent and secure portal that brings credit supply and demand together. A cooperation between CAPVERIANT and KfW has been running since November 2019 to search for subsidies via the platform, which represents a major step forward in the expansion of the service offering for municipalities.

Goal target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

Fostering sustainable growth

As pbb Group is committed to long-term and substantial success, it emphasizes healthy and sustainable growth. A core element to this is making sure people are working under humane conditions.

8 Decent work and economic growth
pbb's business model requires highly qualified employees with expert knowledge. The objective therefore is to attract, retain and develop – for the long run – highly qualified employees with deep knowledge, a significant degree of customer focus, leading competence at both divisional and project level, the willingness to be deployed flexibly, and a high degree of entrepreneurial thinking. As postulated in target 5 of goal 8, pbb Group respects all people, independent of age, sex, race, social background, skills, sexual orientation or religion. No form of unfair treatment or discrimination will be tolerated. Labour laws must be safeguarded, and good working conditions must be ensured.

It is important that all employees be bound by the Code of Conduct, the document that makes it clear to all members of staff what pbb Group deems non-negotiable. pbb has an internal office that employees may turn to when they feel that discrimination pursuant to the German General Act on Equal Treatment (Allgemeines Gleichbehandlungsgesetz – "AGG") has occurred.

The value chain is another place in which to make sure that people work in a safe and secure environment. This applies not only to service providers and suppliers of pbb Group, but also to the lending business itself. pbb Group provides for that – not only with the Know Your Customer (KYC) process for clients and business partners, but also in its core business, where internal or external experts give appraisals.

Markets, technologies, and – as a consequence – society are experiencing ever faster and greater changes. To live up to these changes, it is important to adapt if one wants to ensure sustainable growth. In line with target 2 of goal 8, pbb Group has committed itself to identify changes and trends, and react accordingly. One example is the digital transformation of the Group, something that affects primarily client interfaces, internal processes as well as new products and services.

Goal target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

Goal target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

Goal target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

Shaping a successful future

Shaping and securing the future and the prosperity for the next generations is quite a challenge; there are also ecological aspects to it, such as the preservation of natural resources. Making cities and communities sustainable, as undertaken in SDG 11, is of particular importance in this respect.

11 Sustainable cities and communities
As one of the leading European specialist banks for real estate finance and public investment finance, pbb Group is materially engaged in creating sustainable cities and communities. Sustainability in this context means developing urban living spaces with a functional infrastructure, improving the standard of living. It also means looking at how the buildings themselves are constructed. pbb Group is active in various working groups that focus on developing sustainability standards that will help safeguard natural resources and permanently minimise ecological footprints, making a direct positive contribution to target 3 of goal 11.

Goal target 11.3: By 2030, enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

CSR Committee and Corporate Governance Officer

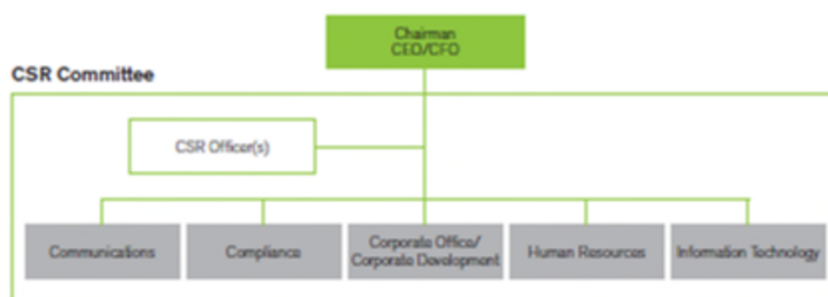
Established in 2017, the CSR Committee is a vital instrument for embedding sustainability topics in pbb Group. Internal rules of procedure determine the purpose and scope of action of the Committee.

The Management Board appoints the CSR Committee members. The Committee is comprised of the division heads of Communications, Compliance, Corporate Office/Corporate Development, Human Resources, Information Technology and the CSR Officer appointed by the CSR Committee.

Membership is linked to the respective function, ensuring that the different divisions are always represented within the Committee. The division head of Communications is the chairman of the CSR Committee.

The chief responsibility of the CSR Committee is to develop a sustainability strategy, and to monitor its implementation. In addition, it determines sustainability targets and the measures necessary to achieve them. Within the scope of an ordinary meeting, held at least once a year, the CSR Officer(s) provide(s) information about current legal developments and market requirements, as well as about the status of implementation and the level of completion of measures and targets determined. Based on this, the CSR Committee may approve new measures and targets where appropriate. The CSR Committee generally follows the principle of materiality when assessing and prioritising measures and targets.

Minutes shall be prepared for any and all meetings. The Management Board shall be informed about the date and time of meetings in a timely manner, and may attend them if desired. Furthermore, the Management Board may obtain further reports and recommendations by the CSR Committee at any time.



Andreas Arndt (CEO/CFO), Member of the Management Board responsible for Corporate Governance, is the Bank's Corporate Governance Officer.

Incentive system

The remuneration system is another vital instrument for deeply embedding sustainability topics in pbb Group. As per its structure, the remuneration system explicitly considers the sustainable development of pbb Group. The focus lies on the economic success of the company (for further details, please refer to the Remuneration Report in the Combined Management Report 2019).

MATERIALITY ANALYSIS

In 2017 and 2018, pbb Group carried out a materiality analysis to identify those aspects of sustainability that are material for pbb Group and its stakeholders. The stakeholder groups that had been identified as material in these analyses were the basis for the materiality analysis during the year under review.

In addition to the general topics of environment, employee and social matters, and corporate governance, particular emphasis in 2019 was placed once more on the identification of industry-specific and pbb Group-specific aspects. The assessment of the topics and aspects with regard to their business relevance and their impact on the Bank's business activities, as well as their position in the value chain, did not change on the previous year, which is why the CSR Committee affirmed them for the non-financial report 2019.

The aspects identified as relevant for pbb Group were assessed with regard to their materiality. pbb Group's CSR Officers assessed the business relevance and impact of business activities according to the German CSR Directive Implementation Act (CSR-Richtlinie-Umsetzungsgesetz).

Relevance for stakeholder groups was elicited by inviting the material stakeholder groups to participate in an online service and share their views on non-financial topics and aspects.

The results of the materiality analysis were presented to and discussed within the CSR Committee.

The following topics and aspects were identified as material:

Topics	Aspects
Industry-specific aspects	Client orientation Sustainable financing solutions Risk management
Corporate governance	Compliance Human rights
Social matters	Considering social implications of business partner choices
Employee matters	Remuneration and employee benefits Working environment Training and continuing professional development

Regarding the influence on pbb Group's business activities, the ability of pbb Group to influence the aspects, as well as regarding the stakeholder relevance, the materiality analysis yielded the following results:

Industry-specific aspects, corporate governance aspects and employee matters have the largest impact on pbb Group's business activities, whilst the impact of environmental aspects is comparatively small due to the business model. The most important industry-specific aspects are client orientation and sustainable financing solutions, as well as sustainable risk management. These aspects significantly impact the business activities of pbb Group. At the same time, it is precisely these topics or aspects that can be influenced relatively effectively by pbb Group. The same applies to corporate governance aspects, compliance and human rights. With regard to employee matters, the following aspects bear the highest relevance: the working environment, training and continuing professional development, occupational safety and health promotion. Even though these aspects also have a significant impact on the Bank's business activities, pbb Group only recognises relatively limited possibilities of influence. Stakeholders considered the aspects of compliance and client orientation to be especially relevant, whilst the relevance of all other topics was only classified as medium.

Our materiality analysis revealed that it is material to our stakeholders that we consider social implications of business partner choices; it is not material, however, from a business model point of view.

Environmental matters were not deemed material.

Even though the materiality analysis does not suggest that the aspects of diversity, occupational safety and mobility are relevant, we report on them on a voluntary basis since our society, employees and environment stakeholder groups consider them material.

In addition, within the framework of the materiality analysis, the essential aspects along the value chain were categorised, and the potential influence of pbb Group along this chain was assessed. pbb Group provides a large part of the entire value chain within commercial real estate finance and public investment finance itself, primarily procuring the funds for the lending business by issuing Pfandbriefe and unsecured bonds, as well as with its retail deposit-taking business with private clients. In the lending business, pbb Group initiates business transactions, provides loan coverage along the entire loan lifecycle up until loan repayment, or, if applicable, the realisation of collateral. Therefore, pbb Group sees the largest potential influence here.

Potential influence on up- and downstream activities of the value chain, on the other hand, are limited to only a few aspects. Upstream activities consist of services rendered by suppliers and service providers. Due to pbb Group's business model, these activities are, however, of only minor significance. The human rights aspect is material for pbb Group; nevertheless, the Bank sees few possibilities for influence. The key downstream activities include especially the use and further utilisation of real estate objects and infrastructure projects financed by pbb Group. In this case, pbb Group recognises a high level of potential influence by implementing sustainable financing solutions.

RISKS AND OPPORTUNITIES

Should pbb Group fail to appropriately take the sustainability aspects categorised as material into consideration, or even ignore them, especially financial and social risks would arise. Ecological risks play merely a minor role.

Financial risks result mainly from the following topics: employee matters, corporate governance, and industry-specific aspects. At the same time, this is the area with the greatest opportunities for pbb Group. The qualifications and satisfaction of our employees are the main foundation for the quality of their work, and thus for the Company's potential. In the case of corporate governance, pbb Group focuses mainly on potential financial damage resulting from Compliance effects, whereas in the case of industry-specific aspects, financial damage may occur due to all material aspects. Client orientation is a fundamental success factor for pbb Group in order to secure the financing portfolio; sustainable financing solutions reduce the credit default probability and increase the value of the collateral; risk management is a central monitoring and management system. It is however particularly the industry-specific aspects which allow pbb Group to positively stand out from its competitors in a direct comparison.

Potential financial risks along the value chain arise especially in connection with the own business activities; however, they also occur downstream with regard to sustainable financing solutions – by the construction and use of financed real estate objects and infrastructure projects.

pbb Group recognises social risks, mainly in relation to corporate governance and industry-specific aspects. Focus is especially laid on reputational risks, as reputational damage can have significant adverse effects on pbb Group's sustainable business success. Along the value chain, potential social risks are mainly related to own business activities; on the other hand, pbb Group classifies risks from upstream activities provided by suppliers and service providers as low.

pbb recognises ecological risks, particularly in relation to industry-specific aspects, and especially within the scope of sustainable financing solutions. Risks arising from non-sustainable construction and use of financed real estate objects and infrastructure projects are in focus, i.e. the potential ecological risks are primarily downstream of the own business activities along the value chain.

pbb Group's sustainability strategy is designed to minimise sustainability risks to the greatest extent possible, whilst making use of the opportunities arising.

In the following, we will illustrate the material sustainability topics and aspects.

INDUSTRY-SPECIFIC ASPECTS

Client orientation

pbb Group's clients are fundamental to its business. Therefore, clients' needs are at the core of pbb Group's business activities, and we continuously strive to reach the best possible balance between client demands and our own interests.

Client orientation is a key success factor for pbb Group in order to generate a business portfolio – through new commitments and loan extensions – that matches the Group's risk and return profile. For pbb, client orientation goes beyond processes and structures – it is the top priority in the everyday business of every employee, and a way of life. In this context, the following aspects are crucial: client dialogue, client proximity, and a relationship based upon trust between pbb Group and its clients.

pbb Group maintains a regular and intensive exchange of views with its clients in order to identify their needs, be it in one-on-one talks in the context of long-standing business relationships, or at events. For instance, pbb regularly attends the real estate trade fairs MIPIM in Cannes and Expo Real in Munich. Moreover, pbb organises regular events for clients in commercial real estate finance and public investment finance. In 2019, pbb Group held client events in Germany, France, the United States, Sweden and the United Kingdom, with a total of 1,750 attendees – including professional real estate clients and experts, as well as public investment finance clients.

pbb plans to organise similar client events in 2020.

Every market has its own local idiosyncrasies. Detailed knowledge about individual market conditions and developments allows pbb to better understand client needs, and to hold an in-depth dialogue with its clients. In order to stay up to date, pbb Group maintains a comprehensive network of sales offices in Germany, other important locations throughout Europe as well as a representative office in New York. Overall, pbb Group maintains ten local sales offices.

Besides a strong local presence, pbb also features expert teams for selected real estate financing aspects; in particular, property development, logistics, retail , and residential topics, hotels – as well as real estate for social purposes and real estate asset management. The purpose of this – and other teams – is to integrate existing know-how within the Bank, to build up more in-depth knowledge in a targeted manner, and to provide expert opinions when needed. The teams consist of experts from different areas of specialisation, and are staffed internationally. Among their regular members are employees from Real Estate Finance, Credit Risk Management, Property Analysis & Valuation, and from the Legal department. The competent decision-making bodies may resolve that the respective expert teams become involved in certain new business processes as consultants, or to provide expert opinions on certain aspects. The Developments and Hotels expert teams get involved at an early stage, immediately after the New Deal Committee (NDC) approves the respective deal.

Based on its profound market and product knowledge, pbb Group enters into a highly specialised dialogue with its clients, aiming at individual and tailor-made financial solutions. Given the early involvement – and structural embedding – of Risk Management (for further details, please refer to the Risk and Opportunity Report in pbb Group's Combined Management Report 2019) and the Property Analysis & Valuation department for real estate valuation purposes, pbb intends to identify, and mitigate, potential risks at an early stage.

In 2019, we further intensified our client dialogue. Clients were asked, in numerous projects, to share their experiences, wishes and ideas to further improve pbb's products and services, or inspire new ones.

Client confidence plays another crucial role in pbb's business activities. As a prerequisite, pbb Group implements the necessary security standards in order to ascertain confidentiality of information about clients, and of all transaction data (cf. the chapter "Data protection"). Since its establishment, pbb Group has used a Code of Conduct, which comprises the non-negotiable requirements that pbb expects from all its employees when dealing with clients, or other stakeholders. The Code of Conduct provides more than just guidance – it is a binding part of each employee's employment contract, and forms the basis for all other framework regulations within pbb Group.

The Code of Conduct is implicitly applied to all clients, prospective clients or other business partners (e.g. suppliers). Should an employee become aware of any indications that a client, prospective client or other business partner (e.g. a supplier) may be involved in illegal activities, or activities that could damage our reputation, he must inform the competent member of the Management Board as well as Compliance. The competent member of the Management Board will initiate a review of every single case – in cooperation with Compliance, and other divisions, if required (such as Internal Audit, Legal, or the Credit department).

In 2014, pbb Group introduced a new purchase guideline designed to streamline purchase processes, and established the so-called Compliance Caution Framework (CCF Scout). CCF Scout is used as an IT-based search engine to check business partners, counterparties, purchasers or suppliers for entries or any sort of conspicuous features immediately, and at an early stage, before new business is generated or an existing business relationship is extended. CCF Scout entries have been collected by a respected external service provider, which draws upon worldwide sanctions lists collated from publicly available sources, such as the EU, OFAC, or the German Bundesbank.

Furthermore, CCF Scout comprises relevant information from press releases and media content. Regarding client confidence, fair treatment is another crucial factor. pbb Group is committed to openness, professionalism and excellence when providing services to clients. This also includes a high performance standard as well as appropriate and effective complaints management that ensures the efficient, targeted and rapid processing of complaints. Complaints received not only offer the chance to amend mistakes, and to restore client satisfaction – they also provide important clues to organisational weaknesses.

Therefore, pbb Group takes every complaint seriously, handles them carefully, and documents them irrespective of background or appropriateness. For this purpose, pbb Group has established a dedicated process in order to ensure that complaints are dealt with efficiently – this process has been laid out in an internal guideline, which is binding for all employees. Via pbb Group's different homepages customers and other interested parties can get access to information about how complaints are being dealt with (inter alia information with regards to existing possibilities for complaints submission, the procedure of complaint management, alternative dispute settlement procedures). The centralized office responsible for complaints within pbb Group collects all complaints, reviews them on a regular basis, and provides reports to the Management Board and the Supervisory Board, amongst others. In 2019, the number of complaints was in the low double-digit range, as it had been during the previous years.

Sustainabe financing solutions

As a specialist bank, pbb Group finances commercial real estate projects as well as infrastructure projects of the public sector. pbb Group sets high standards when granting loans – also in terms of sustainability. As a general rule, pbb Group's actions are always within the boundaries set by legal, and – in particular – the applicable supervisory requirements.

Furthermore, pbb Group has laid out additional ethical and moral standards in its Code of Conduct, which emphasises sustainable behaviour. pbb Group does not support business practices that could harm our reputation or give rise to the suspicion that the client is acting unlawfully, or is violating our ethical and moral standards. Illegal activities or activities that could otherwise damage the Group's reputation include:

- Money laundering
- Financing terrorism
- Drug trafficking
- Illegal weapons trade
- Violation of human rights
- Human trafficking
- Smuggling of goods
- Bribery of government officials or other officials
- Granting and/or accepting undue benefits
- Tax offences
- Illegal or unauthorised use of property, including land ownership
- Market abuse, such as market manipulation or insider trading
- All forms of organised crime
- Environmental pollution, including excessive emissions, illegal waste disposal as well as any type of falsification of documents associated therewith
- Illegal use of labour, including forced labour and child labour

The above list is not exhaustive, yet representative of pbb Group's commitment to distance itself from any illegal practices or any other activities that may damage its reputation. Our ethical principles and guidelines are above income respectively return from individual transactions.

Besides economic aspects, ecological considerations, also the sustainability of income streams and the building structure itself all play important roles for the financing of commercial building projects and the overall real estate portfolio.

If pbb were to ignore its sustainability principles, the Group would considerably increase potential risk regarding interest and principal payments, and the repayment of granted loans. In addition, this would represent significant financial risk for clients and real estate investors, given that their equity investments would be drawn upon before the loans granted by pbb in any form of insolvency proceedings. Therefore, the interests of pbb Group are in line with general sustainability interests.

pbb Group adopts the principle of economic sustainability in the credit approval – which involves the Management Board – via a clearly defined and carefully designed due diligence process.

Ensuring long-term income streams is generally based on the valuation of relevant aspects, such as economic, demographic and sociographic factors as well as real estate (e.g. property location, sales ratios, occupancy and vacancy rates, tenant structure, rental income, general administrative and maintenance costs) and financing considerations (e.g. financing volume and structure, loan-to-value ratios, financing conditions). The assessment of the building structure sustainability is generally based on the structural quality, taking ecological aspects into account, such as the composition and quality of the used materials and the quality of the construction work. Furthermore, eco certifications are taken into account, such as Green Building Programme certificates, or energy labels. If pbb were to

ignore contaminations of properties, or if it tolerated ecologically irresponsible construction work, the sustainability of the respective property (or the corresponding mortgage securities) would be jeopardised.

In order to ensure financing sustainability, close cooperation between Sales, Risk Management, as well as Property Analysis & Valuation, is required at an early stage of the credit process within pbb Group – which has been laid out in the corresponding process structure and internal guidelines. pbb Group maintains a dedicated department comprising 39 real estate surveyors, and cooperates with external real estate experts. In the case of sites where contamination is suspected, pbb carries out additional research and usually obtains specialised expert opinions. In order to ensure the sustainability of properties yet to be financed, our surveyors provide an assessment of the real estate regarding its economic and structural risks. The assessment result – including any conspicuous or unusual features – are summarised in a property report, which is used, among other factors, to take the credit decision. Furthermore, in the corresponding valuation opinion, the stability of the property value as a financing object is explicitly considered through the lending value concept. More specifically, sustainability aspects such as the energy efficiency of a building, or any contaminations, are considered very carefully in the valuation of properties. In addition, the basis and time intervals for credit decision reviews have been clearly laid down. The same applies to the inspection of properties – our guidelines provide unambiguous instructions as to when (and by whom) these inspections shall be conducted. pbb applies particularly rigorous monitoring and supervisory processes for new buildings as part of so-called development financings, and for construction measures within existing properties (e.g. modernisation or renovation activities) as part of so-called investment financings. Our monitoring processes also comprise working conditions as well as human rights. Given the close cooperation of all pbb divisions, in particular the involvement of Property Analysis & Valuation at an early stage, pbb Group efficiently selects its new business exposure, which is essential for the long-term success of the Group and its clients. Furthermore, this approach allows us to avoid negative repercussions for the environment and society as a whole.

In 2019, pbb initiated a project to identify so-called green properties for new business. A task force is currently evaluating appropriate parameters to facilitate the classification of a property as being green or not. This work will then lay the groundwork for a framework for green bond issuance. In line with market standards, the framework will be based primarily on maximum thresholds for energy consumption for electricity and heating purposes for each type of property.

In Public Investment Finance, pbb Group contributes to society by financing investments for the provision and improvement of public infrastructure.

Many of the public investment financing projects have a direct and sustainably positive social as well as environmental impact. For instance, pbb Group finances investments in social and health properties, public administration buildings, or renewable energy. Whilst the relevant credit process is largely in line with Commercial Real Estate Finance, pbb Group's lending business in Public Investment Finance is not only based on tangible assets and income generated from such assets, but additionally on the credit quality of public-sector entities such as cities or regions. Transactions are also geared towards sustainability: a detailed due diligence process is employed to ensure the long-term value of loan receivables – and hence, debt servicing ability as well as the ability to repay the loan. Social and environmental aspects are incorporated into the assessment.

pbb Group has committed itself to making an active contribution to further develop and promote sustainability standards, including beyond the Bank. For this reason, the Group is active in numerous working groups: in the real estate (financing) business, pbb Group takes part in working groups of the Association of German Pfandbrief Banks (vdp), as well as in the initiative launched by the European Mortgage Federation (EMF) and the European Covered Bond Council (ECBC) to determine energy efficiency of buildings in Europe. Through its participation in working groups as well as in various association bodies, the Group succeeded in further advancing sustainability standards:

For many years, pbb Group has recorded in its internal database whether a particular building has been certified. Since 2019, it must also be recorded what kind of certification the building has, and the status it achieved. Thanks to the active involvement of pbb Group, the vdp valuation committee determined energy-efficiency criteria (as part of a property and market rating) which can be included as additional criteria into vdp's transaction database. pbb Group is currently working on having these criteria included in an enhanced version of the LORA software, a product that is widely used in Germany for the financial assessment of properties.

Risik management

Besides client focus, risk management constitutes another core success factor for pbb to secure its sustainable business performance. Within the framework of risk management, pbb Group identifies, analyses and monitors all potential risks. Given its key importance for pbb Group, the risk management function is anchored as an integral component of the Group, both in terms of organisation and processes. Please refer to the Risk and Opportunity Report in pbb Group's Combined Management Report 2019 for more detailed information on risks and opportunities identified for the various types of risk, within the scope of the risk management and risk control system implemented.

CORPORATE GOVERNANCE

Code of conduct and ethical principles

Transparent, fair, responsible and honest conduct – with the required degree of expertise, professionalism and integrity in dealings with one another, clients and business partners, competitors and the public – are deeply rooted in pbb Group, and require that the relevant legal, supervisory and internal obligations as well as other relevant laws and regulations are implemented and adhered to.

pbb Group's Code of Conduct sets out the ethical and legal framework as well as the indispensable standards the Group expects its employees to live by. The Code of Conduct provides more than just guidance – it is a binding part of each employee's work contract, forming the basis for all other framework regulations within pbb Group. Amongst other things, the Code of Conduct offers very clear guidance on questions regarding relationships with clients, suppliers, shareholders, investors and competitors – as well as how to respond to conflicts of interest, bribery, the granting of advantages, preventing money laundering and market abuse.

pbb Group strives for not supporting any visible business practices that could harm our reputation or give rise to any suspicion that clients or suppliers would thereby violate pbb Group's ethical standards or in breaking the law. The applicable law, as well as all the regulatory provisions in force in the various jurisdictions where pbb Group does business, form the basis for the entire corporate decision-making process and our day-to-day operations. They are complemented by internal rules and detailed process descriptions. As a listed company, pbb adheres to the German Corporate Governance Code under application of the "comply or explain" principle. This Code describes the legal requirements posed for managing and supervising German listed companies. It furthermore reflects current national and international developments, alongside standards of good and responsible corporate management.

Compliance

Compliance means building effective management structures to ensure adherence to statutory and regulatory provisions as well as other legal requirements. This holds especially true for legal requirements concerning the performance of securities services. Compliance with these requirements serves the goal of client/investor protection and, as a consequence, the protection of pbb's reputation. At the core of the norms pbb must adhere to lies the EU Market Abuse Regulation, the German Banking Act (Kreditwesengesetz – "KWG"), the German Securities Trading Act, and the regulations and guidelines based on these documents.

Compliance risks include sanctions, financial losses and reputational risks that may arise from violations of these rules. The Group takes any fraudulent act very seriously, both for commercial reasons and because of its legal obligation to prevent such acts. pbb and its Group entities have devoted themselves to very high standards of honesty, openness and responsibility, applied both within the organisation and during all external business activities. We need to be able to rely on each other, and our clients must be able to trust us. As our employees play a central role in this context, we have established tools that allow our internal staff – as well as external third parties – to blow the whistle on statutory violations and undesirable conduct. Compliance regularly reports on these tools to the Management Board and Supervisory Board.

pbb employees are bound by numerous internal rules and instructions such as the Code of Conduct, but also guidelines on combating other criminal acts, on information security, on preventing money laundering and the financing of terrorism, on economic sanctions, as well as on competition law.

In pursuit of the goals of education and raising awareness amongst staff, all of pbb's employees are obliged to take part in compliance trainings when they join the Bank and on a regular basis thereafter. These trainings cover a variety of topics, including the prevention of money laundering and the financing of terrorism, competition law, combating other criminal acts as well as general compliance issues. The successful participation in these trainings is certified following a test. pbb wants its compliance trainings to align with the Bank's current business model and to cater to the needs of the respective target audience. It therefore offers not only regular trainings, but also individual seminars, workshops and other trainings on demand. Group Internal Audit and external auditors regularly review how these trainings are conducted.

Banks are bound by a plethora of legal, regulatory and administrative requirements that have been installed to provide clients and business partners with a high degree of security. pbb Group, in turn, has installed various processes to ensure compliance with these provisions, such as a centralised monitoring process for Key Controls and risks. This so-called Control Attestation Process includes a quarterly report of all Divisions to Compliance.

pbb has identified key risks for this process, based on the risk map and the annual Operational Risk Assessment. These key risks have been assigned so-called Key Controls, which are subject to a continuous monitoring and confirmation process. The state of the internal control system is regularly reported to the Management Board and the Supervisory Board, based on the Key Controls in all business divisions.

In January 2018, the legal monitoring system was replaced by a new workflow system to identify which norms and regulations apply to pbb and ensure adherence. The new system offers comprehensive content on norms – quality-assured by a third party and edited – and is designed to help ensure risk allocation, assessment and monitoring in a single system, while also offering the option of linking the system to other systems of the Bank. All business divisions have access to this system and are obliged to identify the norms that are relevant to them, and assess them from a risk perspective. For material norms, a comprehensive control mechanism applies, with the business areas reporting to Compliance on how and to which extent this is done.

Compliance advises the business areas and monitors handling, together with an expert committee (LRRC); it also reports directly to the Management Board and the Supervisory Board.

Pursuant to article 18 of the Market Abuse Regulation, issuers or any person acting by order of or for the account of such issuer must maintain lists of persons who are active on their behalf, and who are authorised to access inside information. pbb Group shall inform these persons on the legal duties associated with access to inside information, and on the legal consequences of violations of rules.

The harmonised purchasing policy stipulates that all relevant purchasing needs must be fulfilled through the IT-based purchasing and contracts management system, which also serves as the contracts database (incl. deadline management). Our purchasing policy also defines the multi-layer approval process, which includes the sourcing unit and is based on a pre-defined assignment of approval powers. Suppliers are regularly rated, allowing us to rank and compare them, to monitor their performance, and talk openly about weak spots.

The relevant Compliance processes are continuously reviewed in pursuit of further digitalisation, expansion of the monitoring system, and reconciliation with pbb Group's risk information. The Management Board and the Supervisory Board's Audit Committee receive detailed reports on all Compliance-relevant topics on a quarterly basis.

Preventing money laundering and terrorism financing

pbb Group has committed to very high standards in the prevention of money laundering and the financing of terrorism, to ensure that constant reforms are always accounted for. The Group has installed comprehensive policies, rules and regulations, and requires all employees to adhere to its stipulations. Examples of the Group's commitment include thorough Know Your Customer (KYC) processes, a continuous review of international lists regarding, inter alia, sanctions, suspicion of money laundering or terrorist financing, as well as risk analysis and ongoing reporting. The actions of pbb Group in this regard are essentially based on the German Money Laundering Act (Geldwäschegesetz – "GWG"), compliance with which is reviewed and controlled through inspections of sales-related units, Compliance and Internal Audit along the three lines of defence. A new KYC team (the Client Lifecycle Management Team) was established at the First Line of Defence in January 2020, to support sales-related units in complying with legal requirements and audits. The task of preventing money laundering and financing of terrorism is constantly revised, and is reviewed by Internal Audit on an annual basis. It is also covered during the audit of the financial statements.

Anti-corruption and bribery

In order to protect against corruption, pbb Group has established clear principles and guidelines for proper and professional conduct – for example in case of conflicts of interest: or in order to fight corruption, active and passive bribery. Special attention is given to accepting and granting benefits and gifts.

In their interactions with government representatives and public agencies, staff must refrain from any actions that could unlawfully influence the decisions of officials. In particular, cash payments, gifts and other benefits or perquisites to officials that could in any way be interpreted as undue influence, bribery or corruption, are prohibited.

Data protection

Handling confidential data with great care is a top priority. We adhere, inter alia, to the EU General Data Protection Regulation, to the German Data Protection Act (Bundesdatenschutzgesetz – "BDSG"), to national/international legal and regulatory provisions, to contractually agreed confidentiality clauses (including concerning the so-called "banking secrecy") as well as to internal regulations on data protection. To ensure that these data protection requirements are met, pbb has implemented controls and sanctions. An in-house data protection officer, in his or her management function, also exercises control tasks.

Further, the issue of data protection is covered in every employment contract, and our staff receive ongoing training regarding data protection issues. Any breach of the data protection rules and regulations may have disciplinary consequences.

Competition and antitrust legislation

In its Code of Conduct and internal instructions, pbb Group has set high standards of compliance with competition and antitrust stipulations as well as rules for discussions with competitors.

The business areas that are of relevance in terms of competition law have been identified. The heads of these business areas are required to regularly report on the Bank's alignment with competition and antitrust legislation to Compliance, as laid out in pbb Group's control concept.

Respect for human rights

Respecting human rights is a matter of great importance to pbb Group. Above and beyond legal requirements, such as set by the German General Act on Equal Treatment and the German Act to Promote Transparency of Pay Structures, pbb Group has installed further non-negotiable stipulations in its Code of Conduct. The Code of Conduct is partly based on the European Convention on Human Rights. pbb Group has bound itself to respecting and complying with human rights. It therefore expressly distances itself from any violation of these rights, whether committed by a member of staff or another stakeholder groups. Transparency, honesty, fairness, as well as dignity and respect are among the most central maxims.

Honouring human rights is paramount – along the entire value chain of pbb Group. It is therefore not only the responsibility of a single function or office, but enshrined in the processes of all material areas, from Human Resources to Loan Markets, or Property Analysis & Valuation.

pbb Group respects all people, independent of age, sex, race, social background, skills, sexual orientation or religion, and is committed to fostering diversity amongst its staff as far as possible. No form of unfair treatment or discrimination will be tolerated. pbb Group sets great store by the diversity of its workforce, which is why the Group is devoted to preventing or removing discrimination against all employees. In terms of prevention, it is important that all employees be bound by the Code of Conduct, the document that makes it clear to all members of staff what pbb Group deems non-negotiable.

pbb has a Complaints Office that employees may turn to when they feel that discrimination pursuant to the German General Act on Equal Treatment has occurred. Complaints made thereto will be reported to the Head of Human Resources, and followed up by an internal clearance and review as to whether the General Act on Equal Treatment has indeed been violated. Depending on the severity, the implications and the legal or economic risks associated with the violation, other entities such as Data Protection, Compliance, Legal, the Management Board or the Works Council may be involved where necessary. Based on the result of the review, further action and appropriate measures will be discussed and decided upon. The Complaints Office informs the complainant about the handling of his or her complaint, and will include a reasoning if the complaint is rejected. The complaint is

documented separately from the personnel file. Employees who discriminate against others do so knowing that there will be labour law-related sanctions and disciplinary measures for their behaviour, ranging from a written warning to a possible redeployment or even dismissal. Furthermore, employees can access a dedicated pamphlet on the pbb intranet that provides information concerning protective measures against discrimination.

pbb Group employees are also duty-bound when it comes to human rights violations by other stakeholders. Should a staff member become aware of any indications that a prospective client or other business partner may be involved in illegal activities or activities that could damage our reputation, they must inform the Member of the Management Board responsible for the relevant area, as well as the Compliance Officer, in accordance with our Code of Conduct. The relevant Member of the Management Board, by involving the Compliance function, will then arrange for an investigation of the specific circumstances. In addition, other organisational units within the Group may also be involved in any further investigations (e.g. Internal Audit, Legal, etc.). The issue is also covered on a preventive basis during the Know Your Customer processes on clients and business partners, as well as during country analysis aimed at identifying target markets. A similar procedure applies to suppliers. In 2019, pbb Group prepared another statement of compliance with the UK Modern Slavery Act, in which suppliers and service providers were identified and the processes that have been set up to ensure conformity with this Act, whose applicability is (currently) limited to the United Kingdom, were laid out. There are plans to expand the scope of this statement to the entire pbb Group.

The issue of human rights is also part of the credit process. Anything that may point to human rights being violated must be noted in the credit application, as part of the assessment or the ongoing credit management.

The Management Board and the Audit Committee are informed about compliance-relevant topics on a quarterly basis. This also applies to human rights abuses that have been reported or have occurred, but in the case of serious breaches, the Management Board and the Audit Committee will be informed as soon as possible.

Further information on human rights can be found in some of the chapters on sustainability issues.

No human rights abuses were known at pbb Group during the 2019 financial year.

EMPLOYEE MATTERS

pbb Group as an employer

An increased need for specialisation and demographic change, as well as an environment marked by regulatory requirements, brings distinct challenges to pbb Group in its HR work. pbb Group's HR work is based on a far-sighted HR strategy, which translates the Group's business and risk strategy (as well as its business model) into the HR world.

pbb's business model requires highly qualified employees with expert knowledge. The key objective of pbb Group's HR strategy therefore is to attract, retain and develop – for the long run – highly qualified employees with vast knowledge, a high degree of quality awareness, customer focus, leading competence at both divisional and project level, the willingness to be deployed flexibly, and a high degree of entrepreneurial thinking.

Implementation of the HR strategy is based on differentiated, strategic personnel planning, where medium- and long-term changes in the workforce and staffing needs are meticulously and systematically assessed and managed from a far-sighted point of view, as part of pbb Group's multi-year planning. We take great care in structuring our organisation and workflows efficiently, and with a focus on our clients. Our lean processes are continuously optimised, also for the purpose of cost-effectiveness.

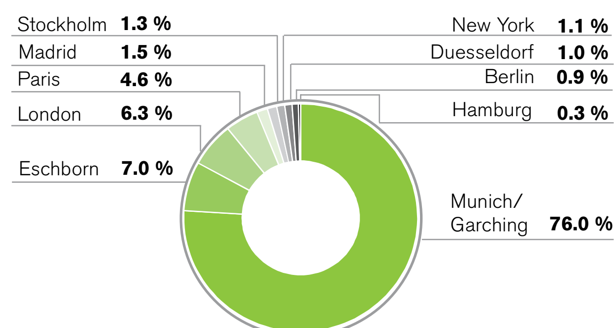
One key element of our HR work is of course the recruitment strategy; another is the successful, diversified internal and external qualification programme, and yet another is the variable remuneration structure, which features incentives for individual performance and promotes cooperation between business divisions, departments and teams.

This shows that our HR strategy directly helps to ensure that pbb Group will remain competitive in the future, since it naturally competes with other banks, and continuously vies for the best talent in the market. pbb Group's working conditions, qualification opportunities and development prospects create opportunities for discovering individual solutions in a dynamic working environment, together with pbb's customers, thinking and acting in a customer-oriented entrepreneurial way.

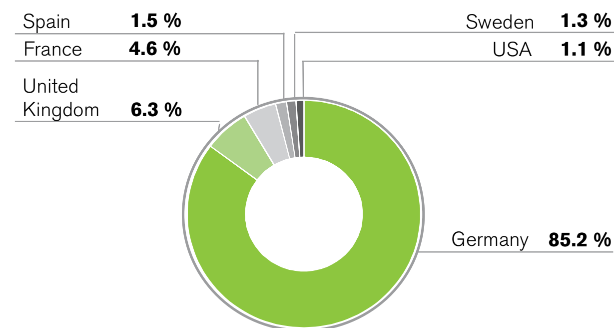
To attract and retain talented employees and managers in the long run, pbb will further increase its positioning and attractiveness during 2020 as a modern and flexible employer. Above and beyond the reinforcement of its recruiting strategy, the Bank's efforts in the field will focus on promoting trainees, talent, and women – as well as diversity. An employer brand is currently being built and can be expected to be finalised in 2020, with subsequent implementation.

Regional distribution of employees (pbb Group)
As of 31 December 2019

Location



Country



As in the previous year, pbb Group's workforce remained stable during 2019. pbb Group employed a total of 797 people at the end of 2019[1] (2018: 793 people). In 2019, the adjusted[2] fluctuation for pbb Group was 10.39% (2018: 8.41%). The ratio of voluntary redundancies was 4.18% (2018: 5.35%).

[1] Headcount pursuant to the HGB (excluding Members of the Management Board, interns and student employees). pbb AG employs 779 people, CAPVERIANT GmbH 18 people. Figures provided below relating to employees refer to the Group.
[2] Adjusted fluctuation comprises any fluctuation initiated by the employer or employee, as well as discharges due to fixed-term employment contracts running out. Adjusted fluctuation was calculated based on an average headcount of employees of 791 (pursuant to the HGB). With various functions being centralised in 2019, and the corresponding staff reductions, fluctuation during the year under review was slightly higher than in 2018.

Remuneration and employee benefits

The remuneration system and the remuneration strategy of pbb Group are integral components of the business and risk strategy of pbb Group. With its remuneration strategy, pbb Group aims to guarantee a fair, performance-oriented remuneration in line with the market – one that is geared to achieving the targets enshrined in the business and risk strategy. The Bank also strives to grant industry-standard employee benefits, while also taking local idiosyncrasies into account. The remuneration strategy is an integral part of the HR strategy. In particular, the variable remuneration system includes appropriate incentives for individual performance, but also promotes and improves cooperation between business divisions, departments and teams. With the variable remuneration components, employees have the chance to participate directly in the success of pbb Group.

Another key element in the remuneration strategy of pbb Group and its remuneration system is the fulfilment of regulatory requirements that deal with the remuneration systems of banks. On the one hand, this means that the implementation of the statutory principle of appropriateness of individual remuneration components regarding total amounts and structures is accounted for, with the ultimate objective being the avoidance of disproportionately high risks. Total remuneration amounts, and individual remuneration components of Members of the Management Board and employees, are subject to regular revision in order to establish an appropriate relation regarding function and performance as well as pbb Group's overall performance. Moreover, the appropriateness of the Group's remuneration system is reviewed by an independent external remuneration consultant, who used external benchmarks to produce market comparisons of remuneration amounts and structures. Also in 2019 the system, structures and amounts of remunerations were reviewed for appropriateness, and confirmed as such by both the Management Board and the Supervisory Board. On the other hand, the remuneration system of pbb Group implements all other regulatory requirements regarding remuneration, in particular those regarding the variable remuneration

component. Of particular importance for pbb Group are the regulatory requirements regarding remuneration systems pursuant to the German Banking Act (Kreditwesengesetz – "KWG"), pursuant to the German Ordinance on Remuneration in Financial Institutions (Institutsvergütungsverordnung – "IVV"; especially requirements on the variable remuneration of risk takers and senior managers), as well as – for the Management Board – those resulting from the German Stock Corporation Act (Aktiengesetz – "AktG") and the German Corporate Governance Code (Deutscher Corporate Governance Kodex – "DCGK"). Compatibility of the remuneration system with the central regulatory requirements is regularly reviewed and approved by an independent external remuneration consultant, external lawyers, and the auditor. pbb established dedicated processes to ensure that any future regulatory changes will be implemented in a timely manner. In 2019, the Bank adjusted its remuneration system, which was developed in 2015, to meet the requirements of the revision of the IVV as amended on 4 August 2017.

The remuneration system of pbb Group is explained in detail in the Remuneration Report of pbb Group's Annual Report.

Fair remuneration
The remuneration of members of staff whose conditions of employment are governed by collective wage agreements, so-called tariff employees, is ruled by the collective agreement for private and public-sector banks.

pbb is a member of the employers' association for the private banking sector (AGV Banken). Tariff employees are assigned to a grade along the scale agreed in collective agreement, based on the work they do. With this approach, an industry-standard minimum remuneration independent from questions of race, ethnicity, sex, religion or personal beliefs, handicaps, age or sexual orientation is warranted, and we ensure that a person's remuneration reflects their qualifications, duties, function as well as their professional experience. To provide for adequacy and fairness in the remuneration of non-tariff employees, remuneration is regularly – usually biennially – reviewed as to whether it is in line with prevailing market terms, using external benchmarks and a functional classification system. The benchmarking is based on a standard classification scheme for job or function levelling (the Towers Watson Career Map), with three so-called career paths ("M" = Management; "P" = Professional, and "T/U" = Services/Administration), and to different career levels within these career paths. This classification lays the groundwork for the verification of remuneration in terms of market levels (the so-called 'market matching'). Further dynamic to the salaries of non-tariff members of staff is determined by the individual employee's qualifications, duties, function, performance as well as professional experience, disregarding questions of race, ethnicity, sex, religion or personal beliefs, handicaps, age and sexual orientation. With this approach, it is warranted that non-tariff employees also receive an adequate and fair remuneration.

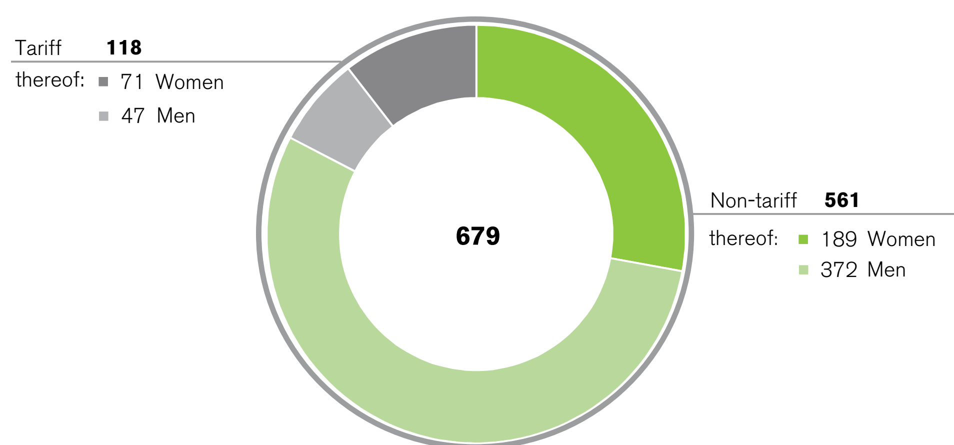
Variable remuneration, which applies throughout pbb and all other Group entities in as uniform and viable a manner as possible, is determined using a formalised and transparent process, harmonised across the Group. Allocation of variable remuneration is based on the achievement of qualitative and quantitative targets at both divisional and individual levels – to the extent possible, reference shall be made to pbb Group's business and risk strategy; target achievement shall be determined for every division and every employee at pbb Group. The qualitative and quantitative divisional targets are established on an annual basis and derived from the corporate targets and the business plans made for the respective financial year. A reference value representing 100% target achievement is defined in advance for each target, to facilitate measuring the level of target achievement and hence, determining variable remuneration.

The entire Management Board of pbb adopts the divisional targets, which are communicated to all employees of the respective divisions at the beginning of the year. At the individual level, every employee is provided with an annual target agreement comprising quantitative and qualitative targets for the current financial year. The measurement of every target is based on indicators, allowing transparent performance assessments at the end of every financial year. pbb Group conducts annual employee reviews within the scope of an annual process; holding these discussions is part of

managers' responsibility. The structured employee review takes place between each employee and his or her manager, for the purpose of assessing the employee's performance during the year under review, and for agreeing upon targets for the following financial year. Accordingly, the employee review is a key instrument for establishing a common understanding of performance standards, as well as on concrete targets and expected results. For this purpose, the discussion focuses on priority issues for the respective financial year, which need to be aligned with (or are derived from) the business and risk strategy. Employee review and performance appraisal are key management tools which ascertain that staff activities and priorities are aligned with target achievement and the Company's performance, and ensure fair remuneration. Human Resources supports and monitors the regular conduct of employee reviews. A guideline for managers and employees containing important information on target agreements and employee review discussions is available on pbb's intranet.

Company pensions are an important pillar of the additional benefits pbb Group has to offer. For its employees in Germany, pbb Group has established defined-contribution and defined-benefit plans. In the defined-contribution plans, pbb makes payments for commitments by industry-wide organisations such as BVV, the German pension provider for the financial industry; BVV has been an important company pension option for employees joining since 1 April 2004. In all of the Group's non-German entities to which no legal or tariff provisions apply, a company pension scheme – in a locally common form – is in place.

Proportion of tariff employees/non-tariff employees (pbb Group)
As of 31 December 2019



Employee benefits
pbb Group provides members of its staff with a comprehensive employee benefits package, including – depending on the employee's location – capital- building payment schemes, sickness benefit and grants to the statutory sick pay, anniversary pay, lunch allowance, special leave in case of special events and a group accident insurance policy. Depending upon the position an employee holds within the Bank, and/or of the necessity of a car for company travel, pbb Group grants company cars that may be used for private journeys at all German locations.

In Garching and Eschborn, voluntary preventive healthcare measures such as free influenza vaccinations, health checks and computer glasses are available. pbb also has a workplace integration management system in place, which all employees affected may make use of.

During 2019, pbb Group employees in Germany were once again able to lease high-quality communication devices of the newest generation such as PCs, notebooks, tablets or smartphones, through pbb Group at attractive terms and for their private use. The monthly lease instalments are

directly offset against gross salary, allowing pbb employees to benefit from tax benefits for private use of communication technology available in Germany, in line with their own marginal tax rate.

Working environment

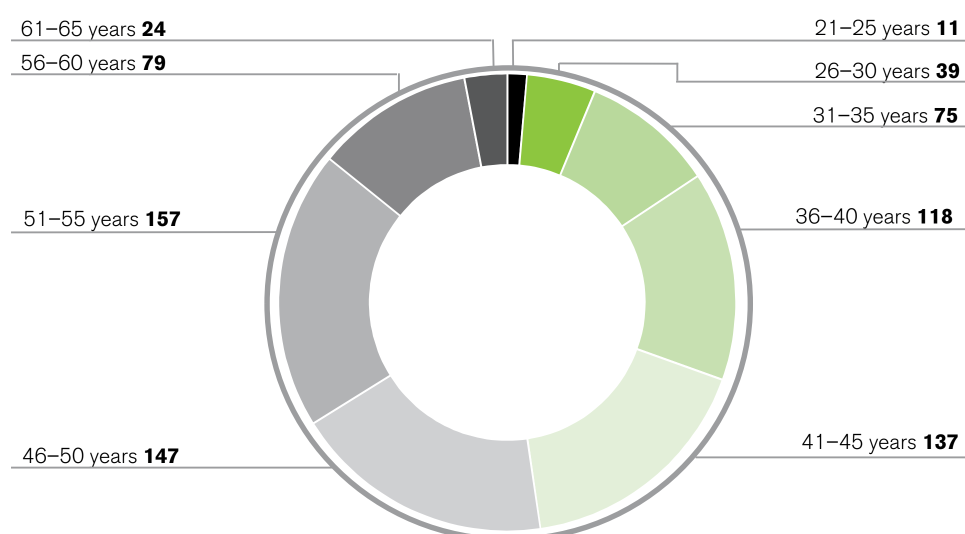
At all of its locations, pbb Group provides its workforce with a modern, secure and healthy environment to work in. Such an environment was also at the core of the move to Garching in 2019. In Garching, pbb Group provides an attractive, transparent and open layout – to further encourage collaboration and communication amongst employees.

pbb Group employs women and men from many different nationalities with different skills and different backgrounds. This workforce forms the basis for sustainable corporate success. Promoting diversity and the personal growth of our employees, with fair working conditions, is at the heart of the Group's HR work. pbb Group respects human dignity, human rights and an employee's right to privacy. All staff members are treated with fairness, dignity and respect. pbb Group has zero tolerance with regard to unfair or discriminatory behaviour towards its staff. It is committed to the principles of equal treatment in the selection and further development of staff, without discriminating against any employee (or potential employee) due to race, ethnicity, sex, religion or personal beliefs, handicaps, age or sexual orientation.

Employees are assessed on their performance alone. pbb Group honours the legal and contractual rights of its employees. These values are essential to the instruction related to compliance, which employees must adhere to as per operating agreements and/or their employment contract, as well as to pbb's Code of Conduct. They form the foundation for our managers' and employees' work. The work and conduct of managers and employees alike – and therefore that of our Bank – is based on mutual respect, openness, honesty and a joint understanding of trusting collaboration. pbb Group focuses in particular on the issue of gender balance. This focus is supported by increased awareness for the topic across all levels and the establishment of a corresponding management and corporate culture, as well as the internal obligation to specifically address the under-represented gender for the given situation when filling vacant positions, while taking in account ability and qualifications. Further information on this topic can be found in our Corporate Governance Report, published as part of the Annual Report 2019.

pbb has an internal office that employees may turn to when they feel that discrimination pursuant to the German General Act on Equal Treatment has occurred. On the intranet, pbb informs its workforce concerning protective measures against discrimination with a dedicated pamphlet.

Age structure of employees (pbb Group)
As of 31 December 2019



Nationalities of pbb Group's employees
31 December 2019

Austrian	9	Macedonia	1
Belgian	2	Peruvian	1
British	35	Poland	4
Burundian	1	Rumania	1
Chinesen	3	Russia	3
Croatian	1	Serbia	1
Czech	2	Slovenian	1
Danish	1	Spain	15
Dutch	5	South African	1
French	43	Swedish	10
German	628	Swiss	1
Indian	5	Turkish	1
Iranian	1	Ukranian	1
Irish	4	US American	8
Italian	6	Vietnamese	1
Latvia	1		
Total			**797**

Fair working conditions
Since 2010, pbb has been a signatory to the "Charta der Vielfalt" (Diversity Charter), thus demonstrating its fundamental commitment to the economic benefits of diversity, tolerance and fairness among a company's employees as well as among its clients and business partners. The Charta der Vielfalt binds its signatories to creating a working environment that is free of prejudice and exclusion, and to establishing an open corporate culture based upon mutual respect and the involvement of stakeholders. This vision is something we actively live. We take heed of an even-keeled structure of our workforce in the demographic sense, and employ people from a vast variety of education and sector backgrounds.

Every employee must be able to address workplace problems without fearing repercussions. pbb Group fosters an open corporate culture that provides for the inclusion of employees in the decision-making process, while at the same time maintaining discretion. It further ensures that procedures exist within the Group in order to resolve any workplace problems confidentially and as quickly as possible, including a Complaints Office for complaints under the German General Act on Equal Treatment, a dedicated contact at Human Resources and a whistleblowing system.

Efficient and committed employees are central to the success of every company, which is why pbb Group invests in the health of its employees. The Health and Safety Committee (Arbeitsschutzausschuss – "ASA") that was implemented in Germany and that includes the company doctor, the occupational safety specialist, as well as representatives of the Works Council and the safety officers, meets on a regular basis to consult on the status of occupational safety and health protection at pbb Group's German offices, and to decide upon measures to improve occupational safety and health, and the prevention of accidents. Company doctors hold consultation hours for employees at the Garching and Eschborn locations. Furthermore, pbb Group voluntarily offers its employees various health measures, for which it assumes the costs. In 2019, we conducted 39 preventive checkups on working with display screen equipment, one workplace health promotion (taking the form of a free health evaluation), one extensive consultation on individual topics and 67 vaccination advice sessions/vaccinations. Our offer to visit a company doctor was taken up by a total of 108 employees.

pbb's managers received training on occupational safety issues from the occupational safety and health specialist in 2019, in compliance with the German Act on the Implementation of Measures of Occupational Safety and Health (Arbeitsschutzgesetz – "ArbSchG"). The Bank also offers first aid courses and further training for first-aiders every year, which also deal with the handling of automated external defibrillators. Similarly, fire prevention training is given annually, with refresher courses held every two years.

During 2019, there was again strong demand among employees in Germany for the Bank's subsidies for preventive healthcare. However, pbb Group's sponsorship of health-promoting measures is not limited to Germany. At both its German and international locations, the Group supports membership in sports clubs or gyms, eyesight tests, training for first-aiders and fire prevention officers, health checkups and workplace evaluations.

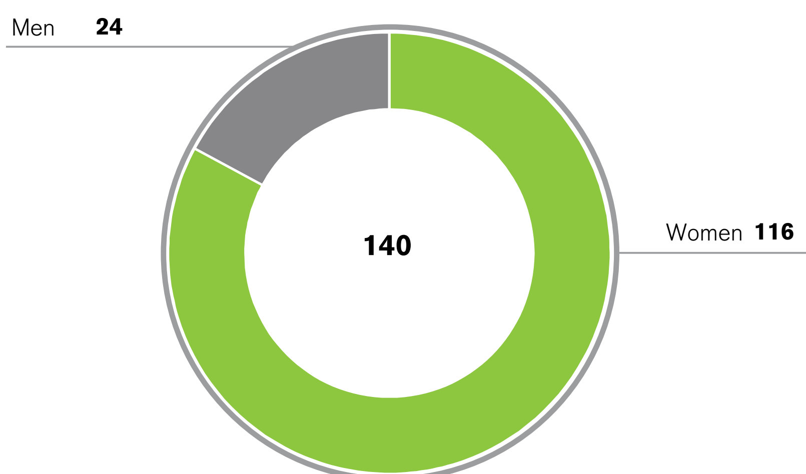
Work-life balance
Helping employees reconcile their responsibilities at home and at work by providing support for childminding has increased in importance – both in the goal of promoting women and in the Bank's endeavour to recruit new employees and become a more attractive employer.

By providing the corresponding work organisational conditions, such as flexible working models or the possibility of working at home, pbb Group offers attractive arrangements that make it easier to balance work and family for all employees. Parental leave is granted in line with statutory provisions; when employees return from parental leave, their working hours are organised with a high degree of flexibility. Furthermore, pbb is subject to the collective wage agreement for the German private banking sector and public-sector banks; in certain conditions, this provides for extended parental leave. In addition, in case of childcare problems pbb offers flexible opportunities to work from home, or permits bringing children to the office. Employees who care for a family member can rely not only on the legal provisions, but may also take unpaid leave or temporarily reduce their working hours.

In the year 2019, pbb Group continued to back employees in balancing working and family life by providing practical support for everyday situations. One example of pbb Group's commitment to its employees' work-life balance is an office established at its new Garching location, which has been equipped with furniture and features appropriate for children and for two employees to "work with children". In 2019, pbb also introduced a "family service" for all employees based in Germany, which provides agency and selective advisory services. This new offering has been taken up by employees in particular for childminding, homecare and eldercare. Similar to the situation in France and the UK, childminding costs for children that have not yet reached school age can now be subsidised in Germany as well. The maximum subsidy in Germany amounts to €100 per month and child. In 2019, a total of 104 employees made use of this childcare allowance.

The flexible working opportunities and the support given to family and working life balance is also demonstrated by the 17.57% share of staff in part-time employment (part-time rate of women: 37.79% and of men: 4.90%).

Part-time distribution (pbb Group)
As of 31 December 2019



Involvement and co-determination
In Germany, pbb has two local Works Councils (in Garching and Eschborn) as well as a representation body for severely handicapped employees. In addition to these bodies, there is a Central Works Council, which has formed an economic committee. No Group works council exists. An employee representation body was active in our French offices in 2019, but no other such bodies exist at the remaining international offices. The working relationship between pbb Group and employee representation bodies is based on trust and regular exchanges, and pbb Group respects their rights.

Employees are kept in the loop through regular information provided by both their representatives and pbb Group via the intranet or e-mail, as well as in personal meetings. All members of staff have the opportunity and the right to organise in trade unions, as well as the right to assembly.

In Germany, regular works meetings ensure that employees are comprehensively informed, and the time employees spend at these meetings is working time.

Training and continuing professional development
The business model pbb Group pursues, and the ever more challenging and complex environment that it is active in, calls for highly qualified employees with expert knowledge. This makes training and continuing professional development (CPD) an important ingredient of the Group's HR strategy, and a core element in achieving the Bank's goals.

In terms of personnel development, pbb Group follows a holistic approach that looks at each individual member of staff, provides them with guidance and, where necessary, support in their professional and personal qualifications and development. This requires that the qualification measures of the individual employee be identified and planned, to meet the needs the employee has in terms of knowledge and competence. Together with the principle of "leading, challenging, encouraging" and the employee review, individual qualification is a cornerstone of pbb Group's personnel development. The annual employee review forms the basis for establishing qualification needs. If qualification measures are earmarked during the review, manager and employee mainly – but not exclusively – select and plan the contents of these measures in the context of the target agreement. Measures may be on-the-job, near-the-job, as well as off-the-job, and may be offered in-house or externally. Where qualification needs arise in the course of the year, further seminars or trainings above and beyond what was agreed during the review may be requested.

pbb Group offers a variety of in-house training and qualification measures, particularly in the realm of technical qualification, management and social skills to make line managers better leaders and to foster understanding for working in teams.

The seminar offering comprises topics specific to pbb, but also methodological and social skills. In the course of the latter, trainings aim at team-building measures, a better understanding of intercultural diversity as well as at general presentation, moderation, negotiation, time management or language skills. Our internal training catalogue is completed by dedicated measures for women, which also help improve the reconciliation of family and working life at pbb Group.

For managers, pbb Group offers a series of seminars on leadership. In our well-established Leadership Academy, we lay the groundwork that is later built upon in our Leadership Excellence trainings that encourage experienced managers to reflect on and improve their management and social skills in an ever more challenging and complex working environment. Above and beyond these offerings, the Bank also enables executives with significant management responsibility to participate in individual coaching sessions.

For young talents that have just completed their university studies, a trainee programme that offers both technical and interdisciplinary qualification makes for a successful start with pbb Group. A mentoring programme rounds off the range of development and support measures.

In 2019, two additional in-house measures for continuous professional development were offered, aiming at improving and expanding the social and methodological skills associated with presenting and moderating – both of which are required in numerous processes.

The continued systematic development on the one hand, and a personnel development that is aligned with the individual requirements of divisions and employees on the other, will continue to challenge pbb Group, while also serving as a gold standard for successful HR work. Against this background, pbb Group strives to continuously evolve its qualification programme – and to continue to do so, going forward. With new initiatives adding to the broad range of existing measures, we will therefore continue to provide important impetus in 2020 and beyond, to support our staff in their professional and personal growth in a modern and goal-driven way. New measures aimed at agile project management as well as further trainings to promote those skills that are necessary for objective and standardised interviews are on the agenda.

In addition to the internal on-the-job and near-the-job measures – organised centrally as well as decentralised – pbb employees can resort to a wide range of external training measures. As a rule, the employee and his or her manager decide on the – in this case mostly professional – training measures within the scope of the employee review. The selected measures depend on the employee's needs. pbb Group paves the way for suitable employees to complete, inter alia, the international Real Estate Manager training (EBS), tailored to the needs of pbb Group.

Expenses for internal and external staff qualification measures totalled €1.1 million (2018: €0.9 million) during 2019. This was equivalent to 3.8 training days on average for each employee (based on an average headcount pursuant to the HGB of 791), or 6.0 days on average for the 483 staff members who took part in the qualification measures.

Knowledge management

In order to make the transition into their job at pbb Group easier for new employees, the Bank is directing a lot of attention to its onboarding efforts. Introduction plans and sponsorships – in which an employee with relevant experience is at the disposal of new employees for any questions they might have – are systematically included and requested by HR as a standard procedure with each new recruitment. pbb Group organises a "Welcome Day" several times a year for all new staff members, providing information on the organisation, the business model and pbb's primary process, as well as on interesting facts from the Human Resources department. The event aims to improve the integration of new employees and to help them become familiar with the business and key (as well as cross-divisional) processes at pbb. For new employees, a welcome brochure with "nice-to-know" information on pbb's locations has been published. New employees receive this brochure on their first day of work at pbb; it is also available on the intranet. We further expanded our social media recruiting during 2019, professionalising the Group's social media presence and qualifying our staff in the use of social media recruitment and active recruitment strategies.

Another centrepiece of our recruitment strategy was university marketing, with pbb participating in ten major recruitment fairs in 2019. In addition, particular universities were identified with which we would like to intensify our connections in the future, and we have case studies scheduled for 2020 to familiarise interested students at partner universities with pbb Group at a faster pace. During the year under review, pbb employees delivered guest lectures on different subjects at universities.

pbb Group has a trainee programme called “Programme for Young Professionals” in place. Young professionals taking part in this 12- to 18-month programme are employed in various areas over the period, thus receiving comprehensive training. This programme was enhanced in 2019 to improve scheduling and operational planning of trainee deployment as well as the overall management of the programme. Trainees will now gain experience not only in the Credit, Finance and Operations departments, but will also in Sales, Portfolio Analysis and Risk Controlling. From 2020 on, the trainee programme will include new measures to strengthen team development and improve the programme's attractiveness with additional impetus.

Furthermore, pbb Group provides student employees with the opportunity for extra-curricular activities in many areas, and – should said students possess the relevant skills – also in combination with a bachelor’s or master’s thesis with practical orientation. In 2018, pbb joined the Fair Company Initiative, the largest employer initiative for fair internships, and obtained the Fair Company label.

Securing new talent and employer attractiveness
pbb Group is facing increasing competition for experts with other employers. To meet the Bank's need for experts in the different departments, pbb Group has implemented various initiatives to attract young talent and strengthen their capabilities. In this context, pbb Group is increasingly paying attention to a better cooperation with key universities. In the event that pbb Group has to cover short-term needs, it uses external resources as well as various recruitment strategies for hiring new employees. Active searches via networks, especially social media, are our main focus. Passive searches are mainly performed via job portals, but also via social media. In addition, we engage agencies if required. Our attractive working conditions are one of our key success factors in attracting experts.

Furthermore, pbb Group has taken action with initiatives aimed at making the "pbb" brand more visible as an attractive employer to experts and young professionals (e.g. new online presence, social media/network presence, participation in selected recruiting fairs). In 2019, a project was also launched to draw up an employer brand for pbb Group. Following an extensive vendor selection process, the Management Board, managers and various employee groups participated in workshops to identify the (cultural) characteristics that define pbb Group as an employer. These findings will serve as the foundation upon which pbb's employer brand will be built in 2020; corresponding initiatives will also be launched.

The fact that 99% of the positions in the Group are permanent, and a very high share of vacancies are filled internally, underlines pbb Group's position as an attractive employer and boosts staff loyalty. The unchanged low to average adjusted fluctuation rate[1] of below 10% in 2017 and 2018 and just over 10% in 2019 further demonstrates this.

[1] Adjusted fluctuation was calculated based on an average headcount of employees of 791 (pursuant to the HGB). With various functions being centralised in 2019, and the corresponding staff reductions, fluctuation during the year under review was slightly higher than in 2018.

ENVIRONMENT

The Group has committed itself to handling natural resources responsibly, to make an active contribution to climate protection by minimising its requirements for energy and raw materials, and to avoid environmental impacts. This is also defined in the Code of Conduct, in which pbb Group has obligated itself to conducting its business in a sustainable and environmentally friendly way, and to identifying environmental risks that may arise in its business activities. Material reference points for this are especially the buildings used by pbb Group, the organisation of workflows, and the mobility of the Group's employees. The member of the Management Board responsible for Information Technology is briefed about the development of different topics, such as energy and paper consumption, but also car pool and travel activity, on a quarterly basis.

Resource Management

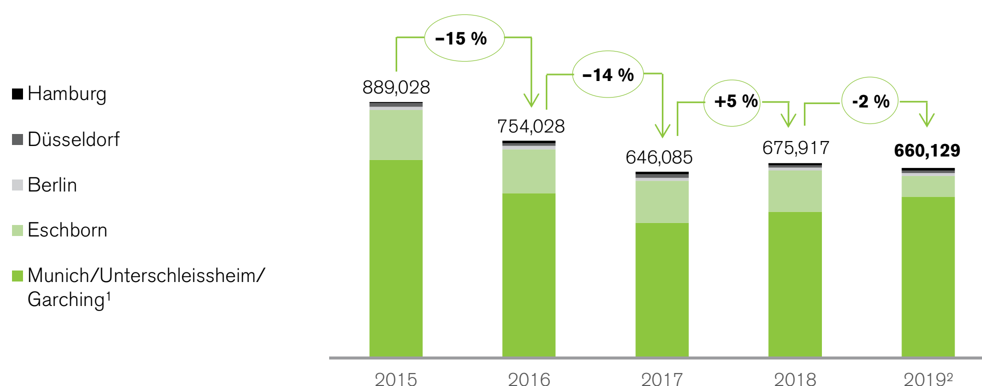
In July 2019, pbb Deutsche Pfandbriefbank AG moved its headquarters from Unterschleissheim to Garching, near Munich. Business Campus Garching, where pbb's new headquarters have been rented, generates electricity from four photovoltaic systems, with most of it being fed into the campus' electric grid. The remainder of the Bank's electricity is also green.

Furthermore, 100% of power demand at pbb's headquarters has been met using renewable energy sources since 2011. As all other German locations have also been using power from renewable energy sources since 2015, respective power supply is carbon-neutral.

Our Annual General Meeting 2019, together with the Annual Press Briefing and the Analyst Conference, were also carried out in a carbon-neutral way; this is also planned for 2020.

Power consumption

in kWh



[1] Unterschleissheim (January 2019 – August 2019), Garching (July 2019 – December 2019).
[2] Estimated electricity consumption 2019 in Berlin, Düsseldorf and Hamburg, December 2019 in Eschborn.

Electricity is permanently saved by using energy-efficient office equipment, such as printers with the Energy Star certificate, and by a strict management of electronic devices in line with demand. With the relocation to Garching, we took the opportunity to reduce the number of printers we use. Whilst previously each department had their own printer, now there is one printer on each floor that can be shared by the various departments located there.

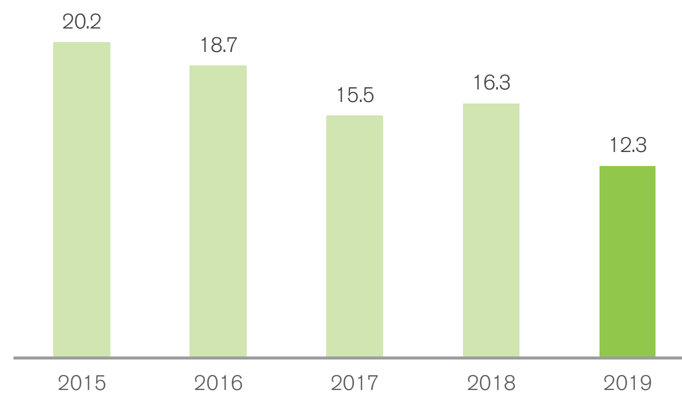
Our strict management of electronic devices ensures that only active employees have a computer: as soon as an employee leaves the Bank, they have to return their computer.

Working processes are generally designed to be as paper-saving as possible. Hence, multiple electronic devices are used in order to replace paper-based processes; for example regarding electronic employee services (recording of working time, payrolls, income tax and social insurance receipts, travel expense accounting, etc.), an electronic invoice and contract management, digital credit files and datarooms.

The paper we use is certified as eco-friendly. Our Annual Reports have been printed climate-neutral since 2015. Furthermore, pbb Group has refrained from the provision of printed interim reports since 2014 and of printing annual reports starting with the Annual Report 2019. We further support recycling by re-using cardboard boxes received as transport packaging.

Purchase of paper and cardboard

in t [1)]



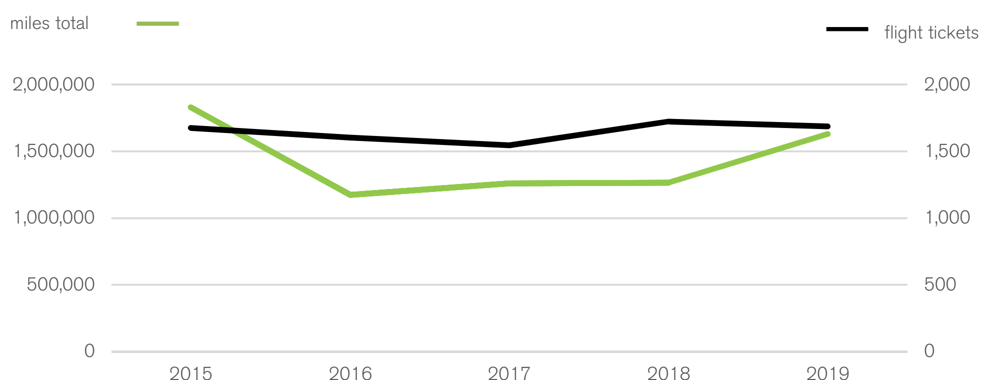
[1)] German locations, excluding printed material.

Mobility

The Travel Policy introduced in 2013 serves as a uniform groupwide standard for all employees' business travel. Besides simplifying effective management and control of travel expenses within pbb Group, it also aims to provide an active contribution to environmental protection.

Employees and their direct superior are jointly responsible for adherence to the Travel Policy, which they will confirm through their electronic signature when recording and approving travel expenses in a designated online tool. Deviations from the Travel Policy are to be avoided. Exemptions from this rule can only be made for the sake of time and cost efficiency and with the superiors' explicit consent.

Flight and travel



Initially, travel activity has decreased in the last years, both in terms of number of booked plane tickets, as well as regarding the amount of miles travelled. However, as a result of the opening of an own office in New York, US, the number of miles travelled saw a slight increase due to the long-distance flight – despite a decreasing number of tickets since 2017.

pbb Group further contributes to the reduction of business travel by the utilisation of video conference systems.

Company cars have to meet well-defined carbon dioxide emission standards in accordance with the Company Car Policy so as to limit their impact on the environment. Vehicles with emissions of more than 155g/km are given a financial penalty, whilst vehicles with emissions of more than 180g/km may not be purchased at all. These thresholds are based on measurements in accordance with the New European Driving Cycle (NEDC). The Worldwide Harmonised Light Vehicles Test Procedure (WLTP) applies to vehicles leased from February 2020 onwards. pbb Group has committed itself to checking these guideline values in the medium term and to align them to revised measurement methods. Compared with the previous year, the number of company cars was markedly reduced, from 105 vehicles in 2018 to 91 in 2019. Based on the NEDC, the average CO2 emission was slightly down, from 138g/km in 2018 to 137g/km in 2019 (45 vehicles), while the WLTP average was 169g/km (46 vehicles).

Business Campus Garching

The newly built headquarters at Business Campus Garching was designed to ensure the responsible use of scarce resources in accordance with cutting-edge energy-efficiency standards.

An energy centre was established early on in the development of the Business Campus, as was a building management system spanning the campus, to allow for the connection of renewable energy sources and thus optimise energy consumption.

The four photovoltaic systems mentioned above generate around 1.1MW of electricity per year, with a large proportion thereof being fed into the Business Campus power grid. 100% of the remaining electricity consumed at the Business Campus is generated in hydro-electric and wind power plants.

During the winter months, a geothermal hot water system operated by municipal utility EWG Garching keeps the Business Campus warm; in the summer, an absorption chiller cools the hot water down to keep the office spaces cool.

Above and beyond the economical use of natural resources, the Business Campus also offers the advantage of a modern mobility concept.

The location is very well connected to the local public transportation network – a high-frequency metro connection makes the use of public transport reliable and attractive for our employees.

Individual charging options help promote the use of e-mobility. In addition, the new location provides car-sharing and carpooling offers.

At the new headquarters, employees can charge their e-bikes in the bike storage, and the landlord is planning to have an adequate – by today's and tomorrow's standards – charging station for electric cars installed in the P3 parking garage by the end of the second quarter of 2020. As pbb Group aims to provide further incentives for employees to use bicycles, the Bank is currently evaluating how to promote bicycle leasing amongst the workforce.

Future-oriented Statements

This report contains future-oriented statements in the form of intentions, assumptions, expectations or forecasts. These statements are based on the plans, estimates and predictions currently available to the management board of pbb. Future-oriented statements therefore only apply on the day on which they are made. We do not undertake any obligation to update such statements in light of new information or future events. By their nature, future-oriented statements contain risks and factors of uncertainty. A number of important factors can contribute to actual results deviating considerably from future-oriented statements. Such factors include the condition of the financial markets in Germany, Europe and the USA, the possible default of borrowers or counterparties of trading companies, the reliability of our principles, procedures and methods for risk management as well as other risks associated with our business activity.

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The German version of this Annual Report is the authoritative version and only the German version of the Combined Management Report and the Consolidated Financial Statements were audited by the auditors.