DEUTSCHE PFANDBRIEFBANK

Disclosure Report

In accordance with Part 8 of the Capital Requirements Regulation (CRR)

as at 31 December 2023

Deutsche Pfandbriefbank Group

Overview

Deutsche Pfandbriefbank Group ("pbb Group")

EU KM1: Key metrics

All figures in € million, unless otherwise stated		a 31.12.2023	b 30.09.2023	c 30.06.2023	d 31.03.2023	e 31.12.2022
	Available own funds (amounts)					
1	Common Equity Tier 1 (CET1) capital	2,910	2,695	2,775	2,831	2,839
2	Tier 1 capital	3,208	2,992	3,072	3,129	3,137
3	Total capital	3,604	3,409	3,518	3,650	3,702
	Risk-weighted exposure amounts					
4	Total risk-weighted exposure amount	18,495	17,766	17,297	17,089	17,017
	Capital ratios (as a percentage of risk-weighted exposure amount)					
5	Common Equity Tier 1 ratio (%)	15.7	15.2	16.0	16.6	16.7
6	Tier 1 ratio (%)	17.3	16.8	17.8	18.3	18.4
7	Total capital ratio (%)	19.5	19.2	20.3	21.4	21.8
	Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)					
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	2.5	2.5	2.5	2.5	2.5
EU 7b	of which: to be made up of CET1 capital (percentage points)	1.4	1.4	1.4	1.4	1.4
EU 7c	of which: to be made up of Tier 1 capital (percentage points)	1.9	1.9	1.9	1.9	1.9
EU 7d	Total SREP own funds requirements (%)	10.5	10.5	10.5	10.5	10.5
	Combined buffer and overall capital requirement (as a percentage of risk-weighted exposure amount)					
8	Capital conservation buffer (%)	2.50	2.50	2.50	2.50	2.50
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	-	-	-	-
9	Institution specific countercyclical capital buffer (%)	0.68	0.67	0.55	0.36	0.22
EU 9a	Systemic risk buffer (%)	0.07	0.07	0.07	0.06	-
10	Global Systemically Important Institution buffer (%)	-	-	-	-	-
EU 10a	Other Systemically Important Institution buffer (%)	-	-	-	-	-
11	Combined buffer requirement (%)	3.25	3.24	3.12	2.92	2.72
EU 11a	Overall capital requirements (%)	13.75	13.74	13.62	13.42	13.22
12	CET1 available after meeting the total SREP own funds requirements (%)	9.0	8.7	9.8	10.4	10.6
	Leverage ratio					
13	Total exposure measure	51,521	48,667	48,594	54,061	53,414
14	Leverage ratio (%)	6.2	6.1	6.3	5.8	5.9
	Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)					
EU 14a	Additional own funds requirements to address the risk of excessive lever-age (%)	-	-	-	-	-
EU 14b	of which: to be made up of CET1 capital (percentage points)	-	-	-	-	-
EU 14c	Total SREP leverage ratio requirements (%)	3.0	3.0	3.0	3.0	3.0
	Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)					
EU 14d	Leverage ratio buffer requirement (%)	-	-	-	-	-
EU 14e	Overall leverage ratio requirements (%)	3.0	3.0	3.0	3.0	3.0
	Liquidity coverage ratio					
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	3,748	4,094	4,719	5,207	5,588
EU 16a	Cash outflows - Total weighted value	2,209	2,226	2,327	2,365	2,670
EU 16b	Cash inflows - Total weighted value	625	467	425	411	339
16	Total net cash outflows (adjusted value)	1,585	1,759	1,902	1,953	2,331
17	Liquidity coverage ratio (%)	255	237	254	275	254
	Net stable funding ratio					
18	Total available stable funding	39,342	38,985	39,210	41,264	40,584
19	Total required stable funding	35,311	34,105	34,488	35,191	36,659
20	NSFR ratio (%)	111	114	114	117	111

Note:

The monetary values in the Disclosure Report of pbb Group are shown in millions of EUR in accordance with Article 19 No. 4 of Regulation (EU) 2021/637 (Pillar 3 framework). The figures are commercially rounded. Due to rounding, the totals shown in the tables may differ slightly from the arithmetical totals of the individual figures shown. Individual figures of less than € 500 thousand are generally not shown due to commercial rounding; these are shown as zero or as zero balances with a dash. When disclosing information, the principle of materiality pursuant to Article 432 (1) CRR is observed.

With regard to the Capital Requirements Regulation (CRR) / Capital Requirements Directive (CRD) regulations, there is still uncertainty as to how some of these regulations are to be interpreted, and some of the related mandatory regulatory standards are not yet available in their final version. Therefore, Deutsche Pfandbriefbank AG ("pbb") will continuously adjust assumptions and models as the understanding and interpretation of the rules and those of the industry evolve. Against this background, current CRR/CRD metrics may not be comparable with previous expectations. CRR/CRD metrics may also not be comparable to similarly labelled metrics of competitors, as their assumptions and estimates may differ from those of pbb.

For determining the own funds requirements for credit risk, pbb Group uses, among other things, the Advanced Internal Ratings Based Approach (A-IRB), which is based on internal rating procedures and is referred to below as the "IRB approach". Insofar as statements are made on the Foundation Internal Ratings Based Approach (F-IRB), this is then explicitly referred to as the "F-IRB".

The deduction amount from common equity tier 1 (CET1) capital for intangible assets (EU CC1, line 8) reported in the disclosure report as at 31 December 2022 was increased by € 4 million to € -34 million, resulting in a slight reduction in regulatory own funds and, among other things, the capital ratios as at the end of 2022.

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Introduction

Deutsche Pfandbriefbank ("pbb")

Deutsche Pfandbriefbank Group ("pbb Group") consists mainly of the parent company Deutsche Pfandbriefbank AG ("pbb"). Headquartered in Munich/Garching, pbb is a leading European specialist bank for commercial real estate finance (Real Estate Finance, REF) with a focus on Pfandbrief-eligible business. Its geographical focus is on Europe and the USA. It issues mortgage Pfandbriefe collateralised by real estate liens and is one of the largest issuers of Pfandbriefe in terms of outstanding volume, making it an important issuer of covered bonds in Europe. In its core markets, pbb offers its clients a strong local presence with expertise across all functions of the financing process. Thanks to its expertise in structuring loans, its cross-border approach and its cooperation with financing partners, pbb realises both complex financings and cross-border transactions.

In March 2023, pbb's business model was expanded to include the new pbb invest division, in which the Bank offers real estate investment management. The objective of pbb invest is to offer property investment products (both real estate funds and real estate debt funds) with sustainable features for institutional investors. In March 2023, the Public Investment Finance (PIF) segment was combined with the other Value Portfolio (VP) segment to form a non-strategic "Non-Core" (NC) segment. Public Investment Finance was therefore no longer considered strategic and no new business was concluded.

pbb's shares are listed in the Prime Standard segment of the Regulated Market of the Frankfurt Stock Exchange. They are included in the SDAX®.

Under the Single Supervisory Mechanism (SSM), pbb is categorised as a significant supervised institution in a euro area member state and is therefore directly supervised by the European Central Bank (ECB). However, pbb is not categorised as a global systemically important institution (G-SII). Disclosure in accordance with Article 441 Capital Requirements Regulation (CRR) "Disclosure of indicators of global systemic importance" is not relevant for pbb Group.

Objective of the disclosure report

With this Disclosure Report, pbb (LEI code: DZZ47B9A52ZJ6LT6VV95), as the parent institution of the regulatory group of institutions, implements the disclosure requirements pursuant to part 8 of the CRR, Regulation (EU) 2019/876 amending Regulation (EU) No. 575/2013, for the pbb Group as at 31 December 2023.

The disclosure requirements are set out in Articles 431 to 455 CRR; additional requirements can be found in Section 26a (1) sentence 1 of the German Banking Act (Kreditwesengesetz - KWG). In order to fulfil these disclosure requirements, pbb applies the uniform disclosure formats of the European Banking Authority (EBA) in accordance with the Implementing Regulation (EU) 2021/637 (Pillar 3 framework). The reporting currency is the euro.

pbb is a large institution pursuant to Article 4 (1) No. 146 CRR and thus implements the frequency requirements pursuant to Article 433a CRR. The relevant disclosure period for this report is generally from 30 September 2023 to 31 December 2023, whereby the reference period for certain tables and information may differ depending on the respective disclosure frequency pursuant to Article 433a CRR. For information that is only required to be disclosed on an annual basis, the reference period is 31 December 2022. For information that is only required on a semi-annual basis, the reference period is 30 June 2023.

In contrast to the Annual Report of pbb Group, the Disclosure Report essentially focuses on the regulatory perspective. Together with the Annual Report, the Disclosure Report is intended to enable the addressee to obtain a comprehensive picture of the current risk profile and risk management of pbb Group.

In accordance with Article 433a (1) letter a CRR, this Disclosure Report includes in particular information on

- the regulatory and accounting structure of pbb Group (scope of application)
- the principles of corporate governance
- Own funds and capital ratios
- the capital requirements and risk-weighted exposure amounts (risk-weighted assets, RWA)
- the leverage ratio and the charge on assets
- pbb Group's general risk management system (risk management objectives and policy)
- Risk management in relation to individual risk types: credit risk (credit risk and counterparty credit risk including CVA risk), market risk (including interest rate risk in the banking book), liquidity and funding risk and environmental, social and governance (ESG) risk.

In accordance with article 432 CRR, institutions may refrain from disclosing one or more of the information specified in part 8, title II/III of the CRR if this information is not to be regarded as material or is to be classified as a business secret or as confidential. pbb has not made use of this option.

The information pursuant to Article 450 CRR on the key features of pbb Group's remuneration policies and practices will be published as an annex to this Disclosure Report on pbb's website (www.pfandbriefbank.com) under Investors / Mandatory Disclosures / Disclosure Report pursuant to Part 8 of the CRR after completion of the remuneration round for the year 2023, probably in the second quarter of 2024.

Formal procedures and regulations for the fulfilment of disclosure obligations

In addition to the Disclosure Report itself, written documentation of the rules and procedures applied in the context of disclosure is a key element in fulfilling the Pillar 3 disclosure requirements. In accordance with Article 431 (3) CRR, pbb Group has implemented formal procedures and rules to ensure the fulfilment of disclosure requirements and their appropriateness in accordance with the CRR, and has documented this in a disclosure guideline. The guideline describes all material, inherent principles of disclosure in accordance with Part 8 of the CRR, such as the type and scope of disclosure, including the use of disclosure waivers, the appropriateness of disclosures, the disclosure medium and disclosure deadlines, the frequency of publication, responsibilities and the integration of the disclosure process into the bank's internal workflows and structures. In addition, the Disclosure Guideline contains guidelines for regularly reviewing the appropriateness and usefulness of the disclosure practices practised within pbb Group and the defined disclosure standards and processes. The Disclosure Guideline is regularly reviewed and adapted to current market requirements.

As part of the disclosure process, pbb Group has installed various control procedures to check the disclosed data for completeness, accuracy and appropriateness. The business processes and regulations implemented for disclosure are also subject to regular monitoring by the internal audit department and review by auditors. The Disclosure Report itself is not audited by pbb Group's auditor, which is why the Pillar 3 disclosures in this report are not audited.

The Disclosure Report is approved by the entire Management Board of pbb. The certificate of the Management Board pursuant to Article 431 (3) CRR can be found at the end of this Disclosure Report.

Means of disclosure

In accordance with article 434 CRR, the Disclosure Report is published as a separate report on pbb's website (www.pfandbriefbank.com) under Investors / Mandatory Publications / Disclosure Report pursuant to Part 8 of the CRR. The ECB, Deutsche Bundesbank and the German Federal Financial Supervisory Authority (BaFin) will be notified by pbb of the date and medium of publication.

Area of application

In accordance with Article 13 (1) CRR, the Disclosure Report includes the disclosure on the basis of the consolidated situation of the pbb Group. Additional disclosure on an individual institution level or on a sub-consolidated basis in accordance with Articles 6 and 13 CRR is not required for pbb as the parent institution of the regulatory banking group. pbb is itself an EU parent institution in accordance with Article 4 (1) No. 29 CRR.

The basis is the regulatory scope of consolidation in accordance with Articles 18 to 24 CRR. There are no differences between the regulatory scope of consolidation and the accounting scope of consolidation for the pbb consolidated financial statements (IFRS) as of the disclosure date. Disclosure on the basis of the consolidated situation requires that business relationships within pbb Group are netted and intragroup transactions are eliminated. The regulatory values and key figures are determined on the basis of the IFRS accounting standards, the International Financial Reporting Standards (IFRS) and International Accounting Standards (IAS).

Waiver rule in accordance with CRR

In financial year 2023, as in the previous year, pbb utilised the simplifications of the so-called waiver rule in accordance with Article 7 (3) CRR. According to the ECB's decision, pbb, as the supervised parent company of pbb Group, is permitted to take certain supervisory requirements into account only on a consolidated Group basis and not additionally at the individual institution level.

pbb continues to fulfil the requirements of Article 7 (3) CRR:

- Within pbb Group, there are no material actual or legal obstacles to the immediate transfer of own funds or repayment of liabilities to the parent company (pbb), nor are there any foreseeable such obstacles. The company which is essential for the financial stability of pbb Group, pbb, is domiciled in Germany. Moreover, pbb is the only credit institution within pbb Group. pbb's interest in the subsidiary IMMO Invest Real Estate GmbH, Munich, which is consolidated for regulatory purposes, amounts to 100% of the voting rights. pbb has a controlling influence over the subsidiary. In addition, the existence of a formal Group-internal decision-making process for the transfer of own funds between pbb as the parent company and superordinated institution of pbb Group and the subsidiary enables an immediate transfer. In the reporting year 2023, as in the previous year, there were no transfers of own funds or repayments of liabilities within the meaning of the regulatory content of article 7 (1) letter a CRR.

- pbb Group has an integrated risk management system which covers the entire Group, including pbb and its subsidiary which is included in the regulatory scope of consolidation of pbb Group. The Management Board of pbb is responsible for the risk management system and decides on the strategies and key issues of risk management and risk organisation. The principles, methods and processes of the risk management system of pbb Group are specified centrally by pbb and are applied in pbb Group (subject to the implementation required under company law and any necessary modifications at the level of the Group company). Employees of pbb are involved in the decision-making bodies of the companies of pbb Group as executive bodies of the respective company, which enables sufficient involvement in all strategic decisions of pbb Group. This also ensures that risk appetite and risk management are handled uniformly in the companies of pbb Group. In addition, pbb has a risk control unit which is responsible for the uniform application of risk management within pbb Group. This is intended to ensure that risk measurement procedures and risk reporting are standardised within pbb Group, and that risk indicators are comparable.

In addition, pbb utilised a waiver granted by the ECB in accordance with section 2a (2) of the KWG in financial year 2023, as in the previous year. Accordingly, pbb is exempted from applying the requirements of section 25a (1) sentence 3 nos. 1, 2 and 3 b) and c) KWG with regard to the risk controlling function for the management of risks, with the exception of liquidity risk, at the level of the individual institution. The conditions required under Article 7 (3) CRR for granting the waiver are met:

There is no material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities to the parent institution in a Member State, nor is such an impediment foreseeable. The risk assessment, risk measurement and risk control procedures required for consolidated supervision also extend to the parent institution in a Member State.

pbb Group has not utilised consolidation on an individual basis in accordance with Article 9 CRR.

Area of application

Organisational and legal structure

This chapter contains information on the legal and organisational structure of pbb Group in accordance with section 26a (1) sentence 1 of the KWG and, in this context, the key criteria of the business model and business strategy, the strategic orientation and the management system of pbb Group.

The pbb Group consists for the most part of the parent company pbb. At the same time, pbb is the superordinated parent institution in accordance with Article 4 (1) CRR of the regulatory group of institutions within the meaning of Section 10a KWG in conjunction with Article 11 et seq. Article 11 et seq. CRR and is therefore responsible for fulfilling the regulatory disclosure requirements.

pbb is a stock corporation under German law, which is registered in the commercial register of the Munich Local Court (HRB 41054). The registered office of pbb is in Munich/Garching. The address of the head office is Parkring 28 in 85748 Garching. In addition, pbb has offices in four other locations in Germany (Eschborn, Düsseldorf, Hamburg and Berlin). Outside Germany, it has branches in London, Madrid, Paris and Stockholm as well as a representative office in New York. pbb Group distributes a large part of its financing activities abroad via these locations.

Business model

The strategic business segment of pbb Group in the financial year 2023 was Commercial Real Estate Finance (REF) with a focus on Pfandbrief-eligible business. The Public Investment Finance (PIF) segment was combined with the other Value Portfolio (VP) segment at the beginning of 2023 to form a non-strategic "Non-Core" (NC) segment. The business model was expanded to include the new pbb invest segment, in which pbb offers real estate investment management. Geographically, the focus is on Europe and the USA. The main core markets in Europe are Germany, France, the United Kingdom, the Nordic countries, individual Central and Eastern European countries, Spain and Benelux. In the USA, pbb concentrates in particular on the metropolitan regions of New York, Washington D.C., Boston, Chicago, San Francisco, Seattle and Los Angeles.

The provision of loans is pbb Group's core business: pbb plays an important role in supplying credit to the property industry. In the course of further anchoring ESG (environmental, social and governance) in the business model and in portfolio management, pbb has further intensified the financing of properties rated as green. Accordingly, green loan eligibility is to be further expanded in new business. In particular, pbb is targeting primary client business and syndication business. In addition to traditional, customised financing solutions, pbb offers its clients derivative products to hedge risks in connection with lending transactions. A trading book for securities and derivatives portfolios with the intention of generating short-term profits is not maintained.

In order to not only offer green financing, but also to support clients in the development of their green transformation, pbb has entered into a cooperation with Groß & Partner and founded Eco Estate GmbH. Eco Estate GmbH offers green consulting and will work with clients to develop possible solutions for the transformation in the areas of ESG, smart building and taxonomy certification, and advise them on implementation options. To further embed ESG in the business model, pbb developed a sustainability roadmap, which represents pbb's ESG framework.

In the lending business, pbb either acts as the sole lender or works together with financing partners - particularly for large-volume transactions. Here, pbb has a broad network of banks and other partners, for example in the areas of insurance or private equity. In this so-called syndicated business, pbb also assumes responsibility for the entire coordination between the members of the syndicate and the borrower as arranger or as agent for tasks in connection with the administration of syndicated loans.

In addition, pbb acts as an underwriter by providing financing in the first instance, either alone or together with other market participants, and then selling parts of these loans to partners within the framework of syndications.

As part of an expansion of its business model, pbb established the new pbb invest division in 2023. The objective of pbb invest is to offer property investment products (both real estate funds and real estate debt funds) with sustainable features for institutional investors. The focus is on applying or expanding pbb Group's core competences and networking in the commercial real estate sector when launching own investment products for distribution to (semi-)professional investors. This is associated with a diversification of revenues towards a (largely) balance sheet-independent generation of commission income. The new division is intended to increase growth potential and profitability while strictly adhering to cost targets.

For its London branch, pbb has submitted an application for authorisation to the UK Financial Conduct Authority (FCA) after the orderly Brexit and the subsequent transition period, in order to be able to continue doing business in the United Kingdom even after the expiry of the so-called "Temporary Permissions Regime". Authorisation was granted by the FCA in mid-2023.

In March 2023, pbb Group decided to focus on its core business of commercial real estate finance as part of its Strategy 2026, and to subsequently withdraw from the public investment finance business. CAPVERIANT GmbH discontinued its operating activities in June 2023. On 27 June 2023, the Management Board of pbb resolved to merge CAPVERIANT GmbH into pbb. Legally, CAPVERIANT was merged into pbb with retroactive economic effect from 1 January 2023 and thus ceased to exist. The (customer) platform was discontinued and the customer base was transferred to the remaining provider in the market.

Strategic portfolio

In Real Estate Finance (REF), the product range is primarily aimed at professional national and international property investors, such as property companies, institutional investors and property funds as well as, particularly in Germany, medium-sized companies and regionally oriented clients. pbb targets complex transactions with medium to large financing volumes. The properties financed are mainly office buildings, residential properties, retail properties, logistics properties and hotels. Other types of property are financed as portfolio additions. In addition, properties for the elderly and care properties in Germany are to be financed again. The regional focus is on the Pfandbrief-eligible core markets in Europe and certain metropolises in the USA. Here, pbb offers both local and cross-border financing expertise. The majority of the financing extended relates to investment loans, i.e. loans for the acquisition or follow-up financing of existing properties with existing cash flows. Financing for property development measures (development financing) is of supplementary importance and includes the property development business in Germany.

Due to the current market situation, pbb is taking a very selective approach to new business. Letting and construction risks are only entered into to a very limited extent.

Non-Core segment (NC)

In addition to the portfolio of the strategic business segment, pbb has a non-strategic portfolio, the so-called NC segment. In this portfolio, the previously strategic PIF portfolio was merged with the VP portfolio, which consisted almost entirely of non-dedicated financing to the public sector (budget financing). The NC segment thus combines all non-strategic public sector financings as well as transactions carried out in the past with public private partnerships and export credit financing. pbb does not enter into any new business in this segment. The portfolio generates interest income and matures in accordance with the contractual maturities. Where economically reasonable and viable, pbb also utilises potential for a faster reduction by means of portfolio or individual sales.

Consolidation & Adjustment (C&A)

In accordance with IFRS 8.28, a reconciliation of, among other things, profits or losses as well as assets and liabilities of the reportable figures to the consolidated figures must be disclosed. In pbb Group, this reconciliation is shown in the C&A column and does not include any operating business. This column includes, for example, consolidation items from the elimination of intra-group relationships between pbb and its fully consolidated subsidiary.

Refinancing

The refinancing of loans granted is largely carried out with matching maturities and to a large extent via the Pfandbrief market; it is supplemented by unsecured refinancing. Issues are regularly made both on the international capital market in benchmark format and in the form of private placements. pbb organises private placements as bearer or registered securities or in the form of fixed-interest deposits in accordance with investor requirements. The term and interest rate structure can be negotiated individually. In line with the lending business, issues are predominantly denominated in EUR. pbb prefers to refinance foreign currency business in the USA, the United Kingdom and Sweden directly in the corresponding currency. This avoids currency swaps as far as possible and reduces the need for unsecured excess cover for Pfandbriefe.

pbb issues Mortgage Pfandbriefe and is one of the largest issuers of Pfandbriefe in Germany in terms of outstanding volume (source: Association of German Pfandbrief Banks - 2023).

Unsecured refinancing is carried out on the capital market via promissory note loans, bearer bonds and fixed-interest deposits in the "senior preferred" risk class.

Investors in debt instruments are banks, funds, insurance companies, central banks and sovereign wealth funds. In this context, pbb has a particular strategic focus on further developing its funding base with the aim of further diversifying and expanding its investor base. To this end, "green bonds" have been issued since the beginning of 2021 in order to also offer investors with sustainability requirements an investment opportunity.

pbb is stepping up its deposit business with private investors in Germany. The online platform pbb direkt (www.pbbdirekt.com) and third-party providers offer overnight and fixed-term deposits in EUR and US dollars. This line of business has now grown to € 6.6 billion in the portfolio and is increasingly substituting unsecured capital market funding.

In the measures provided by the ECB, pbb participated in the Targeted Longer Term Refinancing Operations (TLTRO III) in 2020 and 2021 due to the attractive conditions. At the end of June 2023, a further tranche of € 1.8 billion of the TLTRO III liability was repaid. This leaves only a residual liability of € 0.9 billion until 2024.

Strategic orientation

pbb Group's business strategy is geared towards continuous value-adding business success. The assessment and appropriate pricing of risk in the lending business on the one hand, and access to the refinancing markets with adequate conditions on the other, are decisive for business success. Another key success factor is the management of the existing portfolio with the aim of recognising changing risks at an early stage and mitigating them with suitable measures.

For the financial years 2024 to 2026, pbb's Management Board has set itself the objective of strengthening pbb Group's earnings power. In terms of earnings, the strategic focus is particularly on the business activities in the core REF segment described above. By consistently focussing on commercial real estate finance, pbb launched further strategic initiatives in 2023 in order to increasingly diversify its business model over the coming years, and to lay the foundations for future earnings growth and higher profitability. The cornerstone of both the core business and new strategic initiatives remains pbb's risk-conservative approach, based on pbb's expertise in its markets.

As part of the strategy process, pbb reviews, plans and implements measures to further develop its core business on the basis of its expertise, and to be prepared for existing and expected challenges. The common objective of the strategic measures is to achieve a sustainable strengthening of the business model with a positive contribution to profitability.

The specific strategic initiatives include the measures described below.

In terms of earnings, the strategic focus is particularly on the business activities in the core business described above and increasing their profitability. By expanding the product range, profitability is to be further increased while strictly adhering to cost targets and the desired risk profile. More green loans are to be granted, with an unchanged "focus-on-core" strategy. pbb will continue to concentrate on properties in good locations with stable cash flows and low re-letting risks. We also pay attention to professional, crisis-experienced investors.

pbb Group aims to become the leading partner for financing the green transformation of the commercial real estate sector in Europe. Overall, pbb has identified five overarching sustainability objectives. Two of the objectives relate to the Bank's business model, specifically the positioning as a transformation (re-)financier in the property industry and sustainable (re-)financing overall. Other overarching objectives relate to sustainable operational ecology and the fulfilment of regulatory requirements. In addition, holistic transparency and communication form the central basis of pbb Group's economic success and its values. pbb is expressly committed to the Paris Climate Agreement and the Sustainable Finance goals of the EU and the German Federal Government. For this reason, pbb Group is working on aligning its loan portfolios and business operations with the objectives of the Paris Climate Agreement. With the goal of a 1.5-degree climate alignment by 2050, pbb has set itself a fundamental long-term climate target, according to which it is strategically managed. Building on this, a long-term decarbonisation pathway for the REF portfolio and a climate management concept are being established. In addition, pbb is evaluating further objectives of the Paris Climate Agreement and measures derived from it, which address further social sustainability aspects. Sustainable finance is defined as a central pillar of the holistic ESG strategy. The aim is to support the transformation of the property industry towards the general goal of climate neutrality by 2050. For pbb's long-term ESG positioning, a sustainability roadmap is being developed, which represents pbb's ESG framework. It comprises various monothematic compasses, such as the climate or social compass, which define the vision, objectives and their operationalisation. In future, ESG is to be viewed more quantitatively. Furthermore, pbb is developing a holistic climate management system to control emissions from business operations and from pbb's portfolio.

In order to fulfil pbb Group's claim to be a transformation companion and to meet the expectations of its stakeholders, pbb Group also deals intensively with the topic of sustainability within its own company. As part of a materiality analysis, the most relevant sustainability topics were identified and corresponding objectives and measures were derived. These are updated regularly. For example, the Group's own ecological footprint, i.e. in particular the CO_2 emissions resulting from its own business processes, is to be permanently and continuously reduced. In addition to sector-specific aspects, such as pbb Group's role as a transformation companion and the sustainable transformation of the business portfolio and business operations, pbb Group pays particular attention to strong corporate governance, social issues and its employees.

As a globally active company, pbb is fully committed to respecting and upholding human rights and undertakes to strengthen these rights and prevent human rights violations. In addition to the Code of Conduct, a human rights guideline sets out a corresponding framework. pbb has been a member of the UN Global Compact since February 2022. It has thus committed itself to observing ten principles that deal with human rights, labour standards, the environment and anti-corruption. As part of this membership, pbb published a progress report for the first time in April 2022.

As a further strategic measure, pbb Group aims to increase its commission income. The first step in this direction has already been taken with the new pbb invest division. The aim is to offer property investment products with sustainable features for (semi-)professional investors. Real Estate Investment Management focuses on two product series: (i) the real estate fund comprises direct property investments, initially in Germany, and sales to (semi-)professional investors in Germany, and (ii) the real estate debt fund comprises investments in commercial property financing, initially with a focus on borrowers in Europe, and sales to (semi-)professional investors in Germany. For the first real estate fund, pbb is cooperating with Universal Investment and for the first real estate debt fund with Hauck Aufhäuser Lampe, both of which serve pbb invest as capital management company/alternative investment fund manager (KVG/AIFM) for the fund business. In the future, the acquisition of a separate KVG/AIFM licence will be considered, which would require a separate legal entity (subsidiary). pbb is also examining whether possible options for inorganic growth can be considered.

In order to always have sufficient liquidity, even in the current interest rate environment, pbb Group is diversifying its funding via the deposit-taking business of "pbb direkt". pbb plans to increase its deposit-taking business to a volume of € 7.8 billion (2024), € 8.3 billion (2025) and € 9.1 billion respectively by the end of 2026, in order to further diversify its funding base in a cost-efficient manner. The portfolio of deposits from private customers has almost doubled since the beginning of 2021 and amounted to € 6.6 billion as at 31 December 2023. To further support growth, pbb enters into cooperations. Cooperations of this kind complement pbb's activities and are to be further expanded in the future.

In addition to the earnings side, pbb Group is also focussing on increasing its efficiency. To this end, relevant cost drivers are being identified and digitalisation is being further developed. pbb has set itself the target of keeping the cost base stable, and thus bringing the cost-income ratio below 45% by the end of 2026. Around 60% of the targeted savings are to come from operating expenses and around 40% from personnel expenses. This corresponds to a gross headcount reduction of around 15% over the next three years, which is to be achieved in a socially responsible manner and by utilising the age structure.

The downsizing measures are offset by technical improvements and process improvements. For example, pbb's entire organisational structure was analysed for efficiency potential, and appropriate measures were derived. The greatest efficiency potential can be found in the lending process. Further process improvements were identified, such as the optimisation of committee structures for credit decisions, as well as potential redundancies between committees and cross-divisional service offerings in the credit process. In addition, pbb is also analysing the Corporate Centre functions for efficiency potential. The reorganisation of an integrated IT target image is also being examined.

In addition to specific efficiency enhancement measures, digitalisation remains a strategic objective. For pbb, digitalisation means leveraging the potential of new technologies to focus on client needs and relationships, improve existing processes and support the development of new products and services. This will expand pbb's business model by creating a digital organisation that leverages the advantages of agile methods. Having already achieved significant improvements in IT support in recent years, both through the use of the digital client portal and the start of implementation of the digitalisation of the lending process, pbb intends to continue to focus on continuous improvement through the digitalisation of further processes. pbb's objective is to optimise sub-processes on the basis of standardisation and automation - also by using new technologies such as artificial intelligence or cloud services - and thus to make them more efficient and customer-oriented. Together with pbb as a strategic partner, the software specialist for financial service providers, SAP Fioneer, is developing a digital credit workplace and is already gradually introducing it. The digital credit workplace supports the initiation and conclusion of new and the management of existing real estate financing in the front and back office while further optimising existing processes.

pbb continues to strive to be an attractive stock with above-average payout ratios. In doing so, it will maintain its current distribution policy for the time being. The distributions are based on the consolidated profit after taxes attributable to ordinary shareholders in accordance with International Financial Reporting Standards (IFRS) less the AT1 coupon. Overall, distributions are made subject to or depending on economic justifiability, macroeconomic risks in general and sector-specific risks in particular (including ESG risks), existing and anticipatable regulatory requirements and demands as well as future growth and investment measures.

Control system

pbb Group's management system is designed to sustainably increase its value, taking into account risk aspects and regulatory requirements. The key criterion here is a balanced relationship between risk and return. The risks taken should be compatible with external and internal risk-bearing capacity guidelines and generate an appropriate return on the capital employed.

Management and measurement are based on a consistent and integrated system of key performance indicators. The KPI system comprises the dimensions of profitability, growth in commercial real estate finance as well as risk limitation and capital of pbb Group. Regular plan/actual comparisons with corresponding analyses show management the causes of deviations in the key performance indicators. Current market developments are also presented, such as possible macroeconomic scenarios or changes in interest rates. In addition to strategic overall bank planning, regular medium-term projections of key profitability figures and (stress) scenario calculations provide management with a comprehensive overview of future business development.

The following financial performance indicators have been defined:

CET1 return on capital after taxes

A key indicator of profitability is the CET1 return on capital after tax, in which the earnings after tax attributable to shareholders less the AT1 coupon are set in relation to the average regulatory CET1 capital available in the financial year.

Earnings before taxes

Profit before tax is another financial performance indicator and is to be increased both through an increase in income and strict cost discipline.

Cost-income ratio

Cost discipline and efficiency are monitored using the cost-income ratio, the ratio of administrative expenses and the result from depreciation, amortisation and write-ups on non-financial assets to operating income.

Nominal volume of REF financing

The nominal volume of financing in the Real Estate Finance (REF) segment is a key factor influencing future earnings power.

New business volume

The financing volume can be controlled primarily by the amount of new business (including prolongations with a term of more than one year), which also represents a financial performance indicator. New business management and new business precalculation are based on a present value approach.

Capital adequacy (ICAAP)

pbb Group's capital adequacy assessment process (ICAAP) is based on two risk-bearing capacity approaches, the normative and the economic perspective. While the normative perspective focuses on the ongoing fulfilment of all capital-related legal and regulatory requirements as well as internal targets, the economic perspective considers all material risks which could jeopardise the economic viability of the institution. Both perspectives are intended to complement each other and ensure pbb Group's ability to survive. A prerequisite for demonstrating risk-bearing capacity in the normative perspective is ongoing compliance with minimum regulatory requirements over a medium-term period, as well as evidence of adequate internal capital to cover material risks over and above this. In the economic perspective, proof of risk-bearing capacity is provided by demonstrating that potential present value losses are adequately covered by internal capital. The methods and results of the risk-bearing capacity analysis are described in detail in the section "Economic capital and risk-bearing capacity (ICAAP)".

Common equity tier 1 ratio (CET1 ratio)

The Common Equity Tier 1 ratio (CET1 ratio) as a key management indicator is calculated regularly by dividing Common Equity Tier 1 (CET1) by risk-weighted assets (RWA). In the reporting year, the Advanced Internal Rating Based Approach (Advanced IRBA) was used for the vast majority of the property portfolio and the Credit Risk Standardised Approach (CRSA) for the remaining portfolio to determine the regulatory capital backing.

For pbb Group, sustainability in the sense of environmental, social and governance (ESG) means making a significant contribution to securing the long-term future through its actions - taking into account the consequences for all its stakeholders. pbb Group endeavours to combine long-term economic success and sustainability aspects in the best possible way. The aim is to create long-term benefits for society and the environment, while at the same time conserving natural resources.

pbb's Management Board and Supervisory Board regularly deal intensively with ESG issues. One basis for this is a system of key figures, which is continuously developed further. Regulatory and market developments are also taken into account. In the last two years, for example, the focus has been on determining the Green Asset Ratios (GAR), which will be published for the first time for the 2023 financial year in both the Non-Financial Report and this Disclosure Report. However, from pbb Group's perspective, the GAR according to the EU taxonomy are not meaningful with regard to the actual share of environmentally sustainable assets, as there are already restrictions in terms of taxonomy eligibility depending on the size and capital market orientation of clients, among other things. No market practices have yet emerged for adjusted and self-defined quotas. Looking ahead, the reduction of CO_2 appears to be emerging as an important cross-company objective. pbb Group is currently developing a climate pathway with the aim of actively steering the REF portfolio towards CO_2 reduction. pbb Group's climate pathway is geared towards limiting global warming to 1.5 degrees Celsius, calculated from the pre-industrial age to the year 2050. The precise intermediate steps towards this goal are still being finalised.

As indicators such as GAR are not very meaningful, no market practice has yet emerged for other indicators and more short-term interim targets still need to be defined for the long-term goal of the CO_2 climate path, pbb Group has not yet defined any non-financial performance indicators within the meaning of GAS 20.105.

Principles of corporate governance

This chapter contains information on the corporate governance rules in accordance with Article 435 (2) CRR and the principles of proper management of the pbb Group in accordance with Section 26a (1) sentence 1 KWG.

Since its IPO in July 2015, pbb has been subject to the obligation to declare compliance with the German Corporate Governance Code (GCGC) in accordance with section 161 of the AktG. The Declarations of Conformity with the German Corporate Governance Code, most recently dated 23 February 2024, are published on pbb's website under Company / Corporate Governance.

Furthermore, please refer to the Report of the Supervisory Board, which can be found in pbb Group's Annual Report 2023, as well as to the Corporate Governance Statement, which is published on pbb's website. This relates in particular to the disclosure requirements pursuant to Article 435 (2) letters d and e CRR regarding issues of the Risk Committee and the flow of information to the Management Board and Supervisory Board, which are also described in this Disclosure Report in the chapter "General organisation and principles of risk management".

In the 2023 financial year, the Supervisory Board established four additional committees to fulfil its duties: Presiding and Nomination Committee, Audit and Digitalisation Committee, Risk Management and Liquidity Strategy Committee and Remuneration Control Committee. The Supervisory Board and its committees held the following number of meetings in 2023

- Supervisory Board ten meetings (including five extraordinary meetings)
- Presiding and Nomination Committee (PNA) nine meetings (four of which were extraordinary)
- Audit and Digitisation Committee (PDA) five meetings
- Risk Management and Liquidity Strategy Committee (RLA) five regular meetings and generally monthly credit meetings in the form of conference calls
- Remuneration Control Committee (RCC) five meetings.

Further information on the activities and composition of the Supervisory Board and its committees can be found in the Annual Report 2023, the Report of the Supervisory Board and the Corporate Governance Statement.

Flow of information to the Management Board and Supervisory Board on risk issues

Flow of information to the Management Board

The following risk reports from the Risk Management & Control (RMC) division regularly inform pbb's Management Board about key figures and ratios as well as material risk aspects which are relevant for the Bank's business and risk management over time.

The Group Risk Report, which is regularly distributed to the Supervisory Board as well as the Management Board, is a very central and comprehensive report. It serves to provide key information on all Group-wide risk aspects. The quarterly report is divided into three parts. The first part consists of a management summary of the Group's key risk aspects. The second part provides a detailed overview of capital adequacy, including the risk types to be capitalised, credit risk, market risk, liquidity risk, operational risk, business risk, stress tests and current topics. The third section is the appendix, which contains more detailed information on individual risk types. In addition to the quarterly reports, there is also a monthly Group Risk Report, which essentially consists of a management summary of the above-mentioned risks.

The monthly ICAAP Flash Report contains information on pbb Group's risk-bearing capacity from a normative and economic perspective. A management summary shows the status of risk-bearing capacity, limit utilisation and comments on material developments based on preliminary figures.

The quarterly ICAAP Forecast Report (quarters Q1, Q2 and Q4) serves to provide forward-looking key information on the ICAAP. It contains projections of the regulatory ratios (e.g. CET1 ratio, Tier 1 ratio) and risk-bearing capacity for the base scenario as well as for stress scenarios.

The daily "Market Risk and Performance Report pbb Group" contains information on value-at-risk (VaR) including VaR limits and their utilisation for all business divisions, sensitivities for all relevant market risk categories and economic performance. Special events and material changes are commented on from a market risk perspective.

The daily liquidity reports for pbb Group and pbb AG show the base, risk and stress scenario for pbb Group and pbb. The reporting is based on contractual cash flows, modelled and optional cash flows as well as assumptions regarding new business and prolongations. Another component is the current and expected liquidity reserve. Special events and material changes are commented on from a liquidity risk perspective.

The quarterly "Key Risk Indicator Report pbb Group" contains Group-wide key risk indicators (KRIs) which are used to monitor OpRisk exposure so that any increased operational risk can be recognised at an early stage.

The "Annual Operational Risk Report pbb Group" summarises the operational risk profile of pbb Group on an annual basis. It contains analyses of operational risk losses, results from reporting such as the Key Risk Indicator Report, results of the operational risk scenarios and the self-assessment for operational risks.

The report on daily limit breaches in pbb Group lists all limit breaches at counterparty and country level. Both new and existing limit breaches are reported to the CRO and the members of pbb's Management Board responsible for Treasury and REF/PIF on a daily basis. A quarterly summary is made available to the entire Management Board of pbb as part of the Group Risk Report.

The structure and content of the various reports are based in particular on the requirements of MaRisk. If the Management Board or Supervisory Board wishes to make changes to the presentation and content, these are communicated either bilaterally with the reporting unit or at Group Risk Committee meetings.

Flow of information to the Supervisory Board

In addition to the full Supervisory Board, the Risk Management and Liquidity Strategy Committee (RLA) in particular receives information on risk-relevant issues from the Supervisory Board. This committee supports the Supervisory Board's control of risk and liquidity management, deals with the risk strategy, reviews the Management Board's risk reporting and is involved in the credit approval process to the extent stipulated in the rules of procedure. It regularly discusses the new business, liquidity and refinancing situation and deals with all types of risk in the banking business, such as credit, market, liquidity and operational risks, taking into account the risk-bearing capacity. It also deals with portfolio reports, the syndication business and development financing, value adjustments for financial assets with impaired creditworthiness, own funds reporting in accordance with SolvV, country limits, asset/liability management and the results of regulatory audits. At least once a year, the RLA also discusses the update of the business and risk strategy as well as the expected medium-term developments on the property markets. In addition, the RLA deals with individual loan cases, insofar as these require approval in accordance with the Management Board's rules of procedure, new business, regular resubmissions and approvals of change requests.

Management or supervisory functions of the Management Board and Supervisory Board

As at the reporting date, the members of pbb's Management Board held 4 and the members of the Supervisory Board held 24 actual management or supervisory functions. These are distributed among the individual members of the Management Board and Supervisory Board as follows:

Management or supervisory functions of the Management Board and Supervisory Board (EU OVB)

Name	Number of actually performed management or supervisory mandate	Number of management or supervisory mandate in accordance with the method referred to Article 91 (3) and (4) of Directive 2013/36/EU
Supervisory Board of pbb as of 31.12.2023		
Dr Louis Hagen		
Hans-Peter Storr	2	2
Karim Bohn		
Susanne Klöß-Braekler	4	4
Georg Kordick	1	1
Gertraud Dirscherl	3	2
Olaf Neumann	1	1
Prof Dr Kerstin Hennig	3	3
Heike Theißing	1	1
Management Board of pbb as of 31.12.2023		
Andreas Arndt	1	1
Thomas Köntgen	1	1
Andreas Schenk	1	1
Marcus Schulte	1	1
Total	**24**	**23**

For details of the respective functions and mandates, please refer to Note 81 "Members of the Supervisory Board and the Management Board" in pbb Group's Annual Report 2023.

Selection of the members of the Management Board and Supervisory Board

In accordance with recommendation C.1 of the GCGC in the version dated 28 April 2022, the Supervisory Board has set specific objectives for its composition in its rules of procedure and has adopted a profile of skills and expertise for the entire Board, which is published on pbb's website. The fulfilment of this skills profile is reported in the Corporate Governance Statement, among other things by means of a skills matrix for the members of the Supervisory Board. These objectives are supplemented by a catalogue of criteria for new Supervisory Board members to be appointed, which specifically takes into account the company-specific and professional requirements.

pbb has drawn up a list of criteria for appointments to the Management Board or the Supervisory Board, which are described below and which pbb considers to be fulfilled by the current office holders. The actual knowledge, skills and experience of the members of the Management Board and the Supervisory Board are published on the Company's website under Company / Management Board or Company / Supervisory Board in the form of their professional careers.

The following criteria catalogues are also part of the "Suitability Policy" adopted by the Management Board and Supervisory Board, which implements the requirements of EBA/ESMA Guideline 2021/07, among others, and describes the processes and criteria for appointing and (regularly) assessing the suitability of members of the Management Board and Supervisory Board. The following criteria must be used to assess the individual suitability of a member of the Management Board/Supervisory Board:

- Time required: Sufficient time to fulfil the functions in the institute
- Compliance with the restriction on mandates, in particular in accordance with Article 91 (3) CRD and Section 25d (3) KWG (Supervisory Board) and Section 25c (2) KWG (Management Board)
- Sufficient knowledge, skills and experience to fulfil all tasks
- Good reputation, honesty and integrity
- Impartiality and independence.

Criteria catalogue Management Board

In accordance with Section 25c KWG, the managing directors (members of the Management Board) of an institution must be professionally qualified and reliable for the management of an institution and must devote sufficient time to the fulfilment of their duties. Professional suitability requires that the managing directors have sufficient theoretical and practical knowledge of the relevant business and management experience.

- Functional expertise
  - If possible, broad experience in at least one business area of pbb, for example Real Estate Finance (front or back office), alternatively also in Corporate or Commercial Banking and ideally in selective Corporate Centre functions required
  - Knowledge of the refinancing of banking business models is advantageous
  - Other relevant practical experience, in connection with:
    - Banking and financial markets
    - legal requirements and regulatory framework
    - strategic planning and an understanding of pbb's strategy and business plan
    - Risk management
    - Accounting and auditing
    - Climate and environmental risks
    - Evaluation of financial information, detection of material problems on the basis of this information and appropriate controls and measures
    - Assessment of the effectiveness of regulations with regard to effective corporate governance and effective controls
    - Compliance (identification and assessment of money laundering risks and terrorist financing).
- Industry expertise
  - Several years of experience in the financial industry required, preferably in commercial or asset-based banking.
- Seniority
  - Authorisation as a managing director of a bank is either already available or is possible in the case of an initial appointment with a reasonable familiarisation phase
  - Many years of management experience in board or senior line functions; this includes correspondingly many years of broad-based management experience and experience in process and restructuring management
  - Strong entrepreneurial thinking and experience in dealing with entrepreneurial tasks, such as further development of the business model and strategy and/or (preferably: banking) management.

> Expertise

- The requirements for managing directors pursuant to Section 25c of the German Banking Act (KWG) necessitate the following areas of expertise in particular: strategic management, corporate development, credit expertise, bank management, sales expertise
- The reliable assessment of credit decisions is particularly important in the area of credit knowledge and expertise. What is required here is a practised, qualified and independent credit decision practice over a sufficiently long period of time
- Knowledge and experience in the context of earnings and risk management as well as knowledge of the methods available in the various areas of bank management are highly relevant in bank management issues.

> Personality

- High degree of persuasiveness and assertiveness - based on well-balanced argumentation
- Appreciative and team-orientated management style
- Strong ability to build and maintain sustainable and trusting relationships with employees, colleagues and external stakeholders of pbb
- High willingness to further develop the company, supported by the ability to recognise and implement necessary changes and to communicate them to third parties
- Credible and honest representative of the Bank in public, including the (customer) markets relevant for pbb.

> Additional requirement CEO

- When filling the CEO position, experience in dealing with external stakeholders (investors, press, rating agencies, etc.) and several years of management experience at board level are required in addition to the relevant specialist expertise (such as strategic planning, corporate management) in board or senior line functions.

> Additional requirement CFO

- When filling the CFO position, appropriate specialist expertise (such as accounting, auditing, controlling) in board or senior line functions is a prerequisite.

> Additional requirement REF

- When filling the Management Board position for the REF division, appropriate specialist expertise (sales, credit and property expertise as well as customer contacts) in board or senior line functions is a prerequisite.

> Additional requirement CRO

- When filling the CRO position, appropriate specialist expertise (such as credit business, risk management, back office, compliance) in board or senior line functions is a prerequisite.

> Additional requirement Treasury

- When filling the Management Board position for the Capital Markets/Treasury division, appropriate specialist expertise (such as capital markets, refinancing) in board or senior line functions is a prerequisite.

> Additional requirement for the member of the Management Board responsible for information technology

- When filling a Management Board position with responsibility for information technology, appropriate specialist expertise in board or senior line functions is a prerequisite or must be ensured through appropriate measures to be set up by the bank to impart these competences.

Supervisory Board competence profile

In accordance with recommendation C.1 of the GCGC as amended on 28 April 2022, the Supervisory Board has adopted a profile of skills and expertise for the Supervisory Board, which is published on pbb's website. This contains the following key provisions:

> At least 5 members of the Supervisory Board, including more than 3 shareholder representatives, should be independent within the meaning of recommendations C.6 and C.7 of the GCGC. In accordance with this Code recommendation, a Supervisory Board member is not to be considered independent in particular if he or she has a personal or business relationship with pbb, its executive bodies, a controlling shareholder or a company affiliated with the latter which may give rise to a material and not merely temporary conflict of interest. With regard to the employee representatives, it is assumed that their independence is not affected by the mere fact that they are employee representatives and have an employment relationship with the Company.

> No more than two former members of the Management Board may be members of the Supervisory Board. Former members of the Management Board should not chair the Supervisory Board or chair a committee.

> As a rule, the members of the Supervisory Board should not be older than 70 years of age and the term of office of a Supervisory Board member should generally end at the end of the Annual General Meeting following the member's completion of 70 years of age.

> As a rule, the maximum term of office for members of the Supervisory Board should not exceed three full terms of office within the meaning of Section 102 (1) AktG.

> Compliance with the legal requirements regarding the maximum number of mandates (cf. section 25d (3) and (3a) KWG) and networking of committees (cf. section 25d (7) sentence 4 KWG).

> Overall, the Supervisory Board should cover all required areas of expertise, which may result in particular from the factors described below. Not all members of the Supervisory Board necessarily have to have these competences. These can also be covered by at least one member or by several members together. These include

- Business model-specific knowledge, in particular property/real estate financing know-how
- International business experience, especially in Europe and the USA
- Capital market experience
- appropriate knowledge of the topics of digitalisation, information technology and information security, including data protection
- Accounting and auditing within the meaning of section 100 (5) AktG/section 25d (9) sentence 3 KWG; accounting and auditing also include sustainability reporting and its audit
- Risk management incl. climate and environmental risks
- Compliance and Internal Audit
- Legal/Corporate Governance
- Sustainability (in particular the environment, social responsibility and good corporate governance).

The fulfilment of this competence profile is reported on in the corporate governance declaration, which also includes the qualification matrix for the members of the Supervisory Board required by Section C.1 of the GCGC.

Supervisory Board criteria catalogue

In accordance with Section 25d KWG, the members of the administrative or supervisory body of an institution must be reliable, have the necessary expertise to fulfil the control function and to assess and monitor the business conducted by the respective company, and devote sufficient time to the performance of their duties. Candidates should have the following competences:

> Functional expertise

- Very good knowledge of the banking business as well as extensive and wide-ranging entrepreneurial experience
- Strong understanding of the evaluation of financial statement documents and reports to the Supervisory Board as well as the regulatory environment of banks.

> Industry expertise

- Many years of experience in the financial industry, management or control required, several years of experience in a pbb business unit desirable.

> Seniority

- Many years of experience in the management of a company or an internationally active bank / organisation / company or
- Many years of experience in a leading position in a large company or in a leading position in a public authority.

> Personality

- High level of counselling competence and persuasiveness combined with diplomatic skills as well as
- Ability to build trust while performing the monitoring task competently.

> Other experiences

- For the chairmanship of the Supervisory Board: Qualification as a manager in accordance with the German Banking Act (KWG) and experience in corporate management in a bank as Chairman of the Management Board or many years of experience as a member of the Management Board.
- For the chair/membership of the Audit and Digitalisation Committee: Special expertise in the areas of auditing or auditing of financial statements within the meaning of Section 25d (9) sentence 2 KWG required; At least one member of the PDA must have expertise in the area of accounting and at least one other member must have expertise in the area of auditing (Section 107 (4) sentence 3 AktG); The chair of the Audit and Digitalisation Committee should generally not also be the chair of the Supervisory Board.
- For the Chair of the Risk Management and Liquidity Strategy Committee: Special expertise in the area of credit is required; the Chair of the Risk Management and Liquidity Strategy Committee should not simultaneously be the Chair of the Supervisory Board or the Chair of another committee.

Succession planning

In order to minimise the risk of a significant loss of expertise and to ensure that the Management Board and Supervisory Board are able to act in the long term, the Supervisory Board has set different appointment and election dates for the members of both the Management Board and the Supervisory Board. In addition, the Supervisory Board, and in particular the Executive and Nomination Committee, continuously reviews and develops medium to long-term succession planning. For its proposals for the election of new shareholder representatives to the Annual General Meeting, the Supervisory Board checks in advance in accordance with the suitability policy that the respective candidate fulfils the legal, regulatory, professional and personal requirements for the mandate and that the specific objectives for the composition of the Supervisory Board from the competence profile for the entire Board are or would be fulfilled, taking into account the individual knowledge of the specific candidate. It also ensures that the respective candidate is able to devote the expected amount of time required.

In the reporting period, the Supervisory Board resolved at its meeting on 10 January 2023 to propose Dr Louis Hagen for election to the Supervisory Board at the Annual General Meeting, thereby taking an important step in terms of succession and continuity on the Supervisory Board. At the Annual General Meeting held on 25 May 2023, Dr Louis Hagen was elected to the Supervisory Board by the shareholders and - as intended - was subsequently appointed Chairman of the Supervisory Board by the Supervisory Board. He thus succeeded Dr Günther Bräunig, who stepped down from the Supervisory Board at the end of the Annual General Meeting. Prof Dr Kerstin Hennig was also elected to the Supervisory Board (as successor to Mr Oliver Puhl) as a shareholder representative by the Annual General Meeting. At its meeting on 10 November 2023, the Supervisory Board also passed a motion for the court appointment of Karim Bohn as the successor to Dr Thomas Duhnkrack. Mr Bohn was subsequently appointed by the court as a member of the Supervisory Board with effect from 30 November 2023.

With regard to Andreas Arndt's contract, which expires in April 2024, the Supervisory Board initiated a structured selection process at an early stage to find a suitable successor for the position of CEO and screened a large number of candidates and conducted interviews with a selection of these candidates with the Supervisory Board. As a result of this selection process, the Supervisory Board appointed Kay Wolf, previously of Deutsche Bank AG, as a member of the Management Board with effect from 1 February 2024, who assumed responsibility as CEO and the associated responsibilities for Communications & Investor Relations, Corporate Office & Corporate Development, Legal and Internal Audit on 1 March 2024. He succeeded Andreas Arndt, who retired at the end of February 2024. Furthermore, Dr Pamela Hoerr joined pbb's Management Board as planned on 17 January 2024, after initially joining pbb as a General Representative on 17 April 2023. She is responsible for Investment Management, Property Analysis & Valuation and, since 1 March 2024, Human Resources.

Further details on the work of the Supervisory Board are presented in the Report of the Supervisory Board, which is published in pbb Group's Annual Report 2023.

Diversity strategy for the selection of members

The Supervisory Board and Management Board take diversity into account when filling management positions in the company and, in particular, endeavour to give appropriate consideration to the underrepresented gender (stipulations in accordance with Sections 76 (4) and 111 (5) AktG). With this in mind, the Management Board and Supervisory Board adopted a guideline on diversity on the Management Board and Supervisory Board in 2018. In principle, every candidate must be reliable and sufficiently qualified. In addition to professional expertise in terms of industry and management experience, candidates should be trustworthy individuals with integrity. The requirements regarding the independence of the mandate holders must also be taken into account during the selection process. If there are several suitable candidates, the objective of maximising diversity is also taken into account. Where possible, the composition of the committees should also reflect the international activities of pbb Group and the composition of the workforce. There are specific requirements for the composition of the Supervisory Board and the Management Board with regard to age and gender. As a rule, the members of the

Management Board should not be older than 60 years. The Supervisory Board has set the following targets for the underrepresented gender, which are to be met by 30 June 2027:

- Planning target for the proportion of women on the Supervisory Board: 30%
- Planning target for the proportion of women on the Management Board: 20%.

As at 31 December 2023, the proportion of women on the Supervisory Board was 44%, the same as on the previous year's reporting date. The proportion of women on the Management Board remained unchanged at 0%. Dr Pamela Hoerr initially joined the company on 17 April 2023 as a general representative and was appointed as a member of the Management Board as planned on 17 January 2024 following regulatory approval, which has since been granted. This also fulfils the target of 20% women on the Management Board. In principle, the Supervisory Board remains committed to specifically taking the underrepresented gender into account when making appointments or expanding the Management Board, provided they are suitable and qualified.

In April 2022, the Management Board also set the previous targets for the first and second management levels below the Management Board and increased them by 5% in each case. The target quotas until 30 June 2027 are therefore as follows:

- Planning target for the proportion of women at first management level: 20%
- Planning target for the proportion of women at second management level: 20%.

At the first management level below the Management Board, the target quota was achieved in 2023 with a proportion of women of 26.3%. At the second management level below the Management Board, the proportion of women was 12.9%. With these targets, pbb emphasises its commitment to increasing the number of women in management positions and to specifically consider women with the appropriate aptitude and qualifications when filling vacant positions. Among other things, increased awareness of the topic across all levels and the establishment of a corresponding management and corporate culture contribute to this. In addition, pbb offers employees attractive work organisation conditions, in particular flexible working time models and the possibility of mobile working, which help to support the compatibility of family and career. Further details can also be found in the Non-Financial Report.

Remuneration policy

The information on the key features of pbb Group's remuneration policies and practices in accordance with article 450 CRR will be published as an annex to this Disclosure Report on pbb's website (www.pfandbriefbank.com) under Investors / Mandatory Disclosures / Disclosure Report pursuant to Part 8 of the CRR after the conclusion of the remuneration round for 2023, probably in the second quarter of 2024.

Regulatory and balance sheet consolidation

This chapter shows the information for the pbb Group in accordance with Article 436 CRR on the basis of consolidation for accounting purposes (basis of consolidation for accounting purposes) and the regulatory basis of consolidation.

Supervisory and accounting scope of consolidation

As part of the disclosure in accordance with Part 8 of the CRR, those group companies that belong to the banking group within the meaning of Section 10a KWG in conjunction with Article 11 et seq. Article 11 et seq. CRR (regulatory scope of consolidation). In contrast to this, the scope of consolidation according to the International Financial Reporting Standards (IFRS) is to be seen as shown in the annual report of pbb Group. As in the previous year, there are no differences between the regulatory scope of consolidation pursuant to Articles 18 to 24 CRR and the accounting scope of consolidation for the IFRS consolidated financial statements as at 31 December 2023.

The following table EU LI3 in accordance with Article 436 (b) CRR shows pbb's subsidiaries consolidated for accounting and regulatory purposes.

EU LI3: Description of the differences between the scopes of consolidation (by single entity)

a	b	c	d	e	f	g	h
	Method of accounting consolidation	Method of regulatory consolidation					Description of the entity
Name of the entity		Full consolidation	Proportional consolidation	Equity method	Neither consolidated nor deducted	Deducted	
Deutsche Pfandbriefbank AG, Munich, Germany	Full consolidation	X	-	-	-	-	Credit institution
IMMO Invest Real Estate GmbH, Munich, Germany	Full consolidation	X	-	-	-	-	Investment company, Acquisition of real estate (-companies) (salvage acquisitions)

In addition to pbb as the parent company of the banking group, one company is subordinated to the regulatory scope of consolidation as of the disclosure date. In accordance with section 10a (5) KWG, pbb Group uses the IFRS consolidated financial statements as a basis for determining the summarised own funds as well as the summarised risk positions in accordance with the CRR. pbb has prepared its consolidated financial statements as of 31 December 2023 in accordance with Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 in accordance with International Financial Reporting Standards (IFRS). The separate financial statements of the consolidated companies are included in the consolidated financial statements of pbb using uniform accounting and valuation principles. The financial year of all fully consolidated companies is the calendar year.

As in the previous year, pbb Group had no non-consolidated subsidiaries as of the disclosure date.

Changes in the financial year

In the financial year 2023, there was a change in both pbb Group's regulatory and accounting basis of consolidation. In March 2023, pbb Group decided to focus on its core business of commercial real estate finance as part of its Strategy 2026, and subsequently withdrew from the public investment finance business. CAPVERIANT GmbH discontinued its operating activities in June 2023. On 27 June 2023, pbb's Management Board resolved to merge CAPVERIANT GmbH into pbb with economic effect from 1 January 2023. The merger was entered in the commercial register and thus became legally effective in September 2023. The merger did not have any impact on pbb Group's development in assets, financial position and earnings.

In addition, pbb co-founded Eco Estate GmbH in May 2023 and has held 35% of the shares in this company since then. The company offers consulting services to companies in the area of environmental social governance (ESG) with a property focus. The shares in this associate, which are immaterial from a Group perspective, are not accounted for in the consolidated financial statements using the equity method, but are recognised at fair value through profit or loss in accordance with IFRS 9.

Exemption pursuant to Article 19 (1) CRR

As of the disclosure date, pbb Group does not utilise the exemption rule of Article 19 (1) CRR in conjunction with Section 31 (3) KWG for any subsidiary.

Special purpose entities

As in the previous year, pbb Group did not use any special purpose entities as at 31 December 2023.

Subsidiaries with capital shortfall

As in the previous year, pbb Group has no non-consolidated subsidiaries as of 31 December 2023, and thus no subsidiaries which have a capital shortfall within the meaning of article 436 letter g CRR and whose participation is deducted from the liable capital of the parent company (pbb) (deduction method).

Transfer of own funds or repayment of liabilities

Within pbb Group, there are no material legal or factual obstacles to the immediate transfer of own funds or to the repayment of liabilities by the parent company. The company that is material for the Group's financial stability, pbb, is domiciled in Germany. As in the previous year, there were no transfers of own funds or repayments of liabilities within the meaning of the provisions of Article 7 (1) (a) CRR in the 2023 reporting year.

Quantitative information on the scope of consolidation

Table EU LI1 in accordance with Article 436 letter c CRR shows a breakdown of the assets and liabilities of pbb's consolidated financial statements (IFRS) according to the regulatory scope of consolidation, broken down into the risk types relevant for regulatory capital backing in accordance with part 3 of the CRR. The pbb consolidated balance sheet (according to the regulatory scope of consolidation) is broken down into the parts relevant for the credit risk framework, counterparty credit risk framework, securitisation framework and market risk framework, as well as the part of the balance sheet items which is not subject to regulatory capital requirements or a capital deduction.

Table EU LI2 in accordance with Article 436 letter d CRR also shows the material differences between the carrying amounts in the balance sheet (in accordance with the regulatory scope of consolidation) and the regulatory exposure at default (EAD) in accordance with the COREP reporting of own funds and own funds requirements.

EU LI1: Differences between the scope of consolidation for accounting purposes and the regulatory scope of consolidation and mapping of financial statement categories to regulatory risk categories

		a	b	c	d	e	f	g
		Carrying values as reported in published financial statements [1)]	Carrying values under scope of regulatory consolidation [2)]	Carrying values of items				
	All figures in € million			Subject to the credit risk framework [3)]	Subject to the CCR framework [4)]	Subject to the securitisation framework [5)]	Subject to the market risk framework [6)]	Not subject to own funds requirements or subject to deduction from own funds [7)]
	Breakdown by asset classes according to the balance sheet in the published financial statements							
1	Cash reserve	2,728	2,728	2,728	-	-	-	-
2	Financial assets at fair value through profit or loss	944	944	450	494	-	154	-
3	Positive fair values of stand-alone derivatives	494	494	-	494	-	68	-
4	Debt securities	123	123	123	-	-	-	-
5	Loans and advances to customers	324	324	324	-	-	86	-
6	Shares in investment funds qualified as debt instruments	3	3	3	-	-	-	-
7	Financial assets at fair value through other comprehensive income	1,475	1,475	1,475	-	-	-	-
8	Debt securities	1,354	1,354	1,354	-	-	-	-
9	Loans and advances to customers	121	121	121	-	-	-	-
10	Financial assets at amortised cost after credit loss allowances	45,228	45,228	44,408	820	-	8,434	-
11	Financial assets at amortised cost before credit loss allowances	45,811	45,811	44,991	820	-	8,918	-
12	Debt securities	4,014	4,014	4,014	-	-	228	-
13	Loans and advances to other banks	2,507	2,507	1,713	794	-	16	-
14	Loans and advances to customers	39,155	39,155	39,129	26	-	8,674	-
15	Claims from finance lease agreements	135	135	135	-	-	-	-
16	Credit loss allowances on financial assets at amortised cost	-583	-583	-583	-	-	-484	
17	Positive fair values of hedge accounting derivatives	251	251	-	251	-	35	-
18	Valuation adjustment from portfolio hedge accounting (assets)	-56	-56	-56	-	-	-	-
19	Tangible assets	20	20	20	-	-	-	-
20	Intangible assets	53	53	28	-	-	-	25
21	Other assets	68	68	19	-	-	-	49
22	Current income tax assets	43	43	43	-	-	-	-
23	Deferred income tax assets	129	129	111	-	-	-	18
24	**Total assets**	**50,883**	**50,883**	**49,226**	**1,565**	**0**	**8,623**	**92**

All figures in € million		a	b	c	d	e	f	g
		Carrying values as reported in published financial statements [1]	**Carrying values under scope of regulatory consolidation [2]**	**Carrying values of items**				
				Subject to the credit risk framework [3]	**Subject to the CCR framework [4]**	**Subject to the securitisation framework [5]**	**Subject to the market risk framework [6]**	**Not subject to own funds requirements or subject to deduction from own funds [7]**
	Breakdown by liability classes according to the balance sheet in the published financial statements							
1	Financial liabilities at fair value through profit or loss	662	662	-	662	-	74	-
2	Negative fair values of stand-alone derivatives	662	662	-	662	-	74	-
3	Financial liabilities measured at amortised cost	45,913	45,913	-	331	-	4,545	45,582
4	Liabilities to other banks	6,079	6,079	-	321	-	149	5,758
5	Liabilities to customers	18,829	18,829	-	10	-	166	18,819
6	Bearer bonds	20,402	20,402	-	-	-	4,230	20,402
7	Subordinated liabilities	603	603	-	-	-	-	603
8	Negative fair values of hedge accounting derivatives	789	789	-	789	-	25	-
9	Valuation adjustment from portfolio hedge accounting (liabilities)	-49	-49	-	-	-	-	-49
10	Provisions	117	117	6	-	-	-	111
11	Other liabilities	68	68	-	-	-	-	68
12	Current income tax liabilities	18	18	-	-	-	-	18
13	**Liabilities**	**47,518**	**47,518**	**6**	**1,782**	**0**	**4,644**	**45,730**
14	Equity	3,365	3,365	-	-	-	-	3,365
15	**Total equity and liabilities**	**50,883**	**50,883**	**6**	**1,782**	**0**	**4,644**	**49,095**

[1] Carrying amounts according to International Financial Reporting Standards (IFRS) in accordance with pbb's consolidated financial statements (after adoption of the annual financial statements).
[2] There are no differences between the regulatory scope of consolidation and the accounting scope of consolidation for pbb's consolidated financial statements (IFRS) as of the disclosure date.
[3] In accordance with the Pillar 3 framework, Annex VI, exposures for which the exposure value is determined in accordance with Part 3, Title II, Chapter 2 "Standardised Approach" and Chapter 3 "IRB Approach" of the CRR.
[4] In accordance with the Pillar 3 framework, Annex VI, exposures for which the exposure value is determined in accordance with Part 3, Title II, Chapter 6 "Counterparty credit risk" of the CRR (derivatives).
This column also includes exposures for which the exposure value is determined in accordance with Part 3, Title II, Chapter 4 "Credit risk mitigation" of the CRR (securities financing transactions).
[5] In accordance with the Pillar 3 framework, Annex VI, exposures for which the exposure value is determined in accordance with Part 3, Title II, Chapter 5 "Securitisation" of the CRR.
[6] In accordance with the Pillar 3 framework, Annex VI, exposures for which the exposure value is determined in accordance with Part 3, Title IV "Own funds requirements for market risk" of the CRR.
[7] Column g shows the amounts deducted from regulatory capital for balance sheet assets. Items with a risk weight of 1,250% are not included;
these are allocated to the relevant risk category (columns c to f).

Breakdown of assets and liabilities

For the pbb Group, the regulatory and accounting basis of consolidation are identical as of the disclosure date; there are no differences in amounts due to a different composition of the basis of consolidation (EU LI1, columns a and b).

In line with pbb Group's business model with its core business of commercial real estate finance focussing on Pfandbrief-eligible business, the assets are primarily subject to a capital requirement for credit risk (column c).

In addition, transactions concluded in foreign currencies are also subject to a capital requirement for market risk (column f). In this respect, these assets/liabilities are allocated to more than one risk type, which is why the sum of the values from columns c to g does not have to correspond to the carrying amount in column b. pbb Group does not maintain a trading book for securities and derivatives portfolios with the intention of generating short-term profits, which is why the transactions are only subject to the capital requirement for foreign currency risk in the banking book with regard to market risk.

Transactions which are subject to counterparty credit risk (derivatives and securities financing transactions) are shown in column d. In connection with its derivatives and securities lending/repo transactions, pbb Group uses standard market master agreements including the respective collateral agreements. The master agreements used for derivatives as well as for securities lending/repo transactions contain netting agreements according to which, for example, in the event of insolvency, a uniform claim is created by terminating and offsetting all transactions concluded under a master agreement, so that in the event of default of the counterparty, pbb only has a claim to the balance of the positive and negative market values of the individual transactions recognised or is obliged to pay them (so-called "close-out netting"). This reduces the credit risk in relation to the respective contractual partner to a single net receivable. In this respect, the credit risk in table EU LI1 relates to both assets and liabilities.

As of the disclosure date, pbb Group still does not have any risk positions from securitisations (column e) in its portfolio.

The capital deduction items for regulatory adjustments in accordance with the CRR (e.g. for intangible assets) are recognised in column g. Further information on these regulatory adjustments is described in the "Own funds" section. Items subject to a risk weight of 1,250% are not included in column g; these are allocated to the relevant risk framework (columns c to f).

Liabilities are predominantly allocated to column g, as these do not constitute risk positions that must be backed by own funds. Exceptions to this are transactions concluded in foreign currencies, which are subject to the market risk framework, and transactions subject to counterparty credit risk (derivative and securities financing transactions, collateral received for derivative transactions), which are subject to the counterparty credit risk framework.

The following table EU LI2 describes the main differences between the carrying amounts in the balance sheet using the regulatory scope of consolidation and the exposure at default (EAD) recognised for regulatory purposes.

EU LI2: Main causes of differences between regulatory exposure amounts and carrying amounts in the financial statements

		a	b	c	d	e
			Items subject to			
All figures in € million		**Total**	**Credit risk framework**	**Securitisation frame-work**	**CCR framework**	**Market risk framework**
1	**Assets carrying value amount under the scope of regulatory consolidation (as per EU LI1) [1]**	**50,883**	**49,226**	**0**	**1,565**	**8,623**
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per EU LI1) [1]	50,883	6	-	1,782	4,644
3	Total net amount under the regulatory scope of consolidation [2]	-	49,220	-	-217	3,979
4	**Off-balance-sheet amounts**	**2,288**	**2288**	**0**	**0**	----
5	Differences in valuations	-	-	-	-	----
6	Differences due to different netting rules, other than those already included in row 2	-703	-	-	-703	----
7	Differences due to consideration of provisions	586	586	-	-	----
8	Differences due to the use of credit risk mitigation techniques (CRMs)	-	-	-	-	----
9	Differences due to credit conversion factors	-797	-797	-	-	----
10	Differences due to securitisation with risk transfer	-	-	-	-	----
11	Other differences	-755	-663	-	-	----
12	**Exposure amounts considered for regulatory purposes [3]**	**51,502**	**50,639**	**0**	**862**	**52**

[1] Carrying amounts according to IFRS consolidated financial statements using the regulatory scope of consolidation (EU LI1, column b).
[2] Net amount after offsetting assets and liabilities, calculated as the difference between line 1 minus line 2.
[3] Regulatory risk exposure values (exposure at default; EAD)

Significant differences between balance sheet carrying amounts and regulatory risk exposure values

The assets according to the pbb consolidated financial statements (IFRS) applying the regulatory scope of consolidation totalled € 50,883 million as of the disclosure date (EU LI2, line 1). The exposure at default (EAD) recognised for regulatory purposes amounted to € 51,502 million (line 12).

The CRR-compliant EAD for credit risk positions represents the outstanding receivable in the event of default and corresponds to the IFRS carrying amount (including accrued interest) for most products. Derivatives and securities financing transactions are an exception, for which the EAD does not correspond to the carrying amount but must be calculated using a different method in accordance with the CRR. This applies, for example, to derivatives in accordance with the supervisory standardised approach (SA-CCR). The EAD is calculated for all receivables, regardless of whether a default event has actually occurred or not. In the case of an existing committed free line, this - multiplied by the product-specific credit conversion factor (CCF) - is included in the EAD as a further component. The CCF indicates how much of a free line is expected to be utilised within one year before a possible default.

The main reasons for the differences between the carrying amounts in the balance sheet (IFRS) and the regulatory risk position values shown in table EU LI2 are as follows:

> Effects resulting from the determination of the risk position values for transactions which are subject to a counterparty credit risk (derivative and securities financing transactions). pbb Group applies the regulatory requirements for off-balance sheet netting (on the basis of standard master agreements and collateral agreements) for derivative financial instruments as well as for securities lending/repo transactions (EU LI2, line 6), provided that the contractual agreements fulfil the requirements for risk-mitigating recognition in accordance with Article 296 CRR or Article 206 CRR.

For derivative transactions, pbb Group applies the standardised method (SA-CCR) in accordance with Article 274 et seq. CRR. On the other hand, derivatives - with the exception of the netting of derivatives concluded with Eurex Clearing - cannot be netted on the balance sheet, as they have different terms (e.g. different maturities or currency underlyings). The collateral agreements (collateral received or provided) cannot be netted with the derivatives on the balance sheet either.

For securities financing transactions, pbb Group applies the provisions for credit risk mitigation in accordance with Chapter 4 of the CRR, the comprehensive method for taking financial collateral into account in accordance with Article 223 et seq. CRR. In addition to the credit risk, the default risk of the counterparty is also taken into account under regulatory law for securities sold under repurchase agreements, which continue to form part of the balance sheet assets.

> The recognition of impairments on financial assets (stages 1 to 3) and provisions for off-balance sheet lending business for risk positions for which the advanced approach based on internal rating procedures (IRBA) is used (EU LI2, line 7). In contrast to the credit risk standardised approach (CRSA), credit risk adjustments are not deducted from the carrying amount in the IRB approach, but are taken into account in the comparison of value adjustments. In the comparison of value adjustments, the difference between the amount of value adjustments recognised (stages 1 to 3) and provisions in the off-balance sheet lending business and the expected loss (EL) is calculated and a value adjustment deficit/surplus is determined.

> The regulatory recognition of credit conversion factors (CCF) on off-balance sheet items (EU LI2, line 9). These include irrevocable loan commitments (such as loans not yet fully disbursed) and contingent liabilities from guarantees and warranty agreements. Irrevocable loan commitments represent the main part of off-balance sheet liabilities.

- Items that are deducted from equity for regulatory purposes, such as parts of intangible assets (purchased and internally generated software), are not included in the risk exposure values. These are recognised under the item "Other differences" (EU LI2, line 11).

  Similarly, both additional valuation adjustments (AVAs) pursuant to Article 34 CRR in conjunction with Article 105 CRR with regard to the prudent valuation of assets recognised at fair value and the other prudential filters pursuant to Articles 32, 33 and 35 CRR have no impact. Article 105 CRR with regard to the prudent valuation of assets recognised at fair value and the other prudential filters in accordance with Articles 32, 33 and 35 CRR have no impact on the carrying amounts (IFRS) or the regulatory exposure values, which is why they are not reported in EU LI2, line 5. These adjustment items to be applied for regulatory purposes adjust the balance sheet equity calculated in accordance with IFRS and are deducted in full from CET1 (see EU CC1, line 7).

- The differences between the balance sheet carrying amounts (EU LI2, line 1) and the regulatory risk position values (EU LI2, line 12) for market risk result from the calculation of the net foreign currency position in accordance with the market risk standardised approach pursuant to Article 325 et seq. CRR. The regulatory foreign currency risk is calculated on the basis of the present values of the assets/liabilities concerned, whereby various offsets between asset and liability items in one currency are applied, while the balance sheet carrying amounts show the respective assets and liabilities in foreign currency.

Prudent valuation of assets

When calculating its own funds, pbb Group takes into account the requirements for a prudent valuation of assets recognised at fair value in accordance with Article 34 CRR "Additional valuation adjustments" in conjunction with Article 105 CRR "Requirements for prudent valuation". Article 105 CRR "Requirements for prudent valuation". To determine these additional valuation adjustments (AVA), pbb Group applies the simplified approach in accordance with Chapter II "Simplified approach for determining AVAs" of Delegated Regulation (EU) 2016/101. Institutions may use this approach in accordance with Article 4 (1) of the Delegated Regulation if the sum of the absolute value of the assets and liabilities recognised at fair value in the annual financial statements less the offsetting options in accordance with Article 4 (2) is below the threshold of € 15 billion. For the pbb Group, this value is € 4.0 billion (31 December 2022: € 4.6 billion) according to pbb's consolidated financial statements (IFRS) as of the disclosure date.

A disclosure of the table EU PV1 according to Article 436 letter e CRR is not relevant for the pbb Group in this respect. The pbb Group does not apply the core concept for determining additional valuation adjustments (AVAs) in accordance with Chapter III of the Delegated Regulation.

Both the additional valuation adjustments (AVAs) in accordance with Article 34 CRR in conjunction with Article 105 CRR with regard to the prudent valuation of assets recognised at fair value and Article 105 CRR with regard to the prudent valuation of assets recognised at fair value as well as the additional prudential filters in accordance with Articles 32 (securitised assets), 33 (hedging transactions for cash flows and changes in the value of own liabilities) and 35 (unrealised gains and losses resulting from fair value accounting) CRR have no impact on the carrying amounts (IFRS) or the regulatory risk exposure values. These adjustment items to be applied for regulatory purposes adjust the balance sheet equity calculated in accordance with IFRS; they lead to an increase or decrease in regulatory own funds.

As of the disclosure date, the additional valuation adjustments for the pbb Group amounted to € 4 million (0.1% of the above-mentioned sum of the absolute value of the assets and liabilities recognised at fair value). These are deducted in full from Common Equity Tier 1 capital (CET1), as shown in the table EU CC1 (line 7).

Equity and assets

Own funds

This chapter shows the information pursuant to Article 437 CRR on pbb Group's own funds. In addition, it contains general information on own funds and eligible liabilities (MREL). A disclosure according to Article 437a CRR (Total Loss Absorbing Capacity, TLAC) is not relevant for pbb Group. pbb is not categorised as a global systemically important institution (G-SII) and is not subject to either Article 92a or Article 92b CRR. The complete qualitative and quantitative MREL information must be disclosed for the first time as of 1 January 2024, i.e. in the Disclosure Report as of 31 December 2024, in accordance with section 51 (3) of the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz - SAG) and section 10 of the Delegated Regulation (EU) 2021/763 (prudential reporting and disclosure of MREL).

The main features of the Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments issued by pbb in accordance with article 437 letters b and c CRR are shown in the separate annex "Disclosure Report (31 December 2023) - Main Features of Capital Instruments". The annex is published alongside this Disclosure Report on pbb's website under Investors / Mandatory Disclosures / Disclosure Report pursuant to Part 8 of the CRR.

Regulatory own funds

Regulatory own funds, which are decisive for the fulfilment of regulatory own funds requirements and thus for the capital backing of the risk types credit risk (credit risk, counterparty credit risk including CVA risk), market risk, operational risk and settlement risk, are determined in accordance with the provisions of Part 2 of the CRR. They are made up of the following:

- Common Equity Tier 1 (CET1) capital
- the additional core capital (Additional Tier 1, AT1) and
- the supplementary capital (Tier 2, T2).

They are based on pbb's consolidated financial statements (IFRS), taking regulatory adjustments into account.

The following table EU CC1 according to article 437 letters a, d, e and f CRR and article 444 letter e CRR shows the composition of regulatory own funds as well as the capital ratios and capital buffers for the pbb Group as of the disclosure date. The basis for the own funds shown in the table is the COREP report of own funds and own funds requirements of pbb Group as of the reporting date 31 December 2023 (after adoption of the 2023 annual financial statements less the AT1 coupon payment). Table EU CC1 contains cross-references (column b) to the respective item in table EU CC2 to reconcile the regulatory own funds with the published pbb Group balance sheet or balance sheet equity (IFRS).

In view of the currently challenging situation on the commercial property markets, and after considering the views of all relevant stakeholders, pbb will not distribute a dividend for the 2023 financial year, thereby strengthening its capitalisation. For the 2022 financial year, pbb paid its shareholders a dividend of € 0.95 per dividend-bearing share (i.e. a total of € 128 million), in accordance with the resolution of the Annual General Meeting on 25 May 2023.

EU CC1: Composition of regulatory own funds

All figures in € million, unless otherwise stated		a 31.12.2023	b Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Common Equity Tier 1 (CET1) capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	2,017	Reference EU CC2, line 31
1a	of which: subscribed capital	380	Reference EU CC2, line 32
1b	of which: additional paid-in capital	1,637	Reference EU CC2, line 33
2	Retained earnings	1,089	Reference EU CC2, line 34
3	Accumulated other comprehensive income (and other reserves)	-112	Reference EU CC2, line 35
EU-3a	Funds for general banking risk	-	
4	Amount of qualifying items referred to in Article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	-	
5	Minority interests (amount allowed in consolidated CET1)	-	
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	74	Reference EU CC2, line 36
6	**Common Equity Tier 1 (CET1) capital before regulatory adjust-ments**	**3,067**	Reference EU CC2, line 38
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	-4	Reference EU CC2, line 39
8	Intangible assets (net of related tax liability) (negative amount)	-25	Reference EU CC2, line 40
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	-18	Reference EU CC2, line 41
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	31	Reference EU CC2, line 42
12	Negative amounts resulting from the calculation of expected loss amounts	-2	Reference EU CC2, line 43
13	Any increase in equity that results from securitised assets (negative amount)	-	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-	Reference EU CC2, line 44
15	Defined-benefit pension fund assets (negative amount)	-	
16	Direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount)	-	
17	Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
EU-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	-	
EU-20b	of which: qualifying holdings outside the financial sector (negative amount)	-	
EU-20c	of which: securitisation positions (negative amount)	-	
EU-20d	of which: free deliveries (negative amount)	-	

All figures in € million, unless otherwise stated		(a) 31.12.2023	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	-	
22	Amount exceeding the 17.65% threshold (negative amount)	-	
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	-	
25	of which: deferred tax assets arising from temporary differences	-	
EU-25a	Losses for the current financial year (negative amount)	-	
EU-25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	-	
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	-	
27a	Other regulatory adjustments to CET1 capital (including IFRS 9 transitional adjustments when relevant)	-137	Reference EU CC2, line 45
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**-157**	Reference EU CC2, line 46
29	**Common Equity Tier 1 (CET1) capital**	**2,910**	Reference EU CC2, line 47
Additional Tier 1 (AT1) capital: instruments			
30	Capital instruments and the related share premium accounts	298	Reference EU CC2, line 48
31	thereof: classified as equity under applicable accounting standards	298	Reference EU CC2, line 49
32	of which: classified as liabilities under applicable accounting standards	-	Reference EU CC2, line 50
33	Amount of qualifying items referred to in Article 484 (4) CRR and the related share premium accounts subject to phase out from AT1 as described in Article 486(3) CRR	-	
EU-33a	Amount of qualifying items referred to in Article 494a(1) CRR subject to phase out from AT1	-	
EU-33b	Amount of qualifying items referred to in Article 494b(1) CRR subject to phase out from AT1	-	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	-	
35	of which: instruments issued by subsidiaries subject to phase out	-	
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	298	Reference EU CC2, line 51
Additional Tier 1 (AT1) capital: regulatory adjustments			
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	-	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	

All figures in € million, unless otherwise stated		(a) 31.12.2023	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
41	Empty set in the EU	-	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	-	
42a	Other regulatory adjustments to AT1 capital	-	
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**0**	Reference EU CC2, line 53
44	**Additional Tier 1 (AT1) capital**	**298**	Reference EU CC2, line 54
45	**Tier 1 capital (T1 = CET1 + AT1)**	**3,208**	Reference EU CC2, line 55
Tier 2 (T2) capital: instruments			
46	Capital instruments and the related share premium accounts	388	Reference EU CC2, line 56
47	Amount of qualifying items referred to in Article 484 (5) CRR and the related share premium accounts subject to phase out from T2 as described in Article 486(4) CRR	-	
EU-47a	Amount of qualifying items referred to in Article 494a (2) CRR subject to phase out from T2	-	
EU-47b	Amount of qualifying items referred to in Article 494b (2) CRR subject to phase out from T2	-	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	-	
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Credit risk adjustments	8	Reference EU CC2, line 57
51	**Tier 2 (T2) capital before regulatory adjustments**	**396**	Reference EU CC2, line 58
Tier 2 (T2) capital: regulatory adjustments			
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	-	
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
54	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
55	Direct, indirect and synthetic holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	
EU-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	-	
EU-56b	Other regulatory adjustments to T2 capital	-	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**0**	Reference EU CC2, line 60
58	**Tier 2 (T2) capital**	**396**	Reference EU CC2, line 61
59	**Total capital (TC = T1 + T2)**	**3,604**	Reference EU CC2, line 62
60	**Total risk exposure amount**	**18,495**	

All figures in € million, unless otherwise stated		(a) 31.12.2023	(b) Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
61	**Common Equity Tier 1 (as a percentage of total risk exposure amount)**	**15.74%**	
62	**Tier 1 (as a percentage of total risk exposure amount)**	**17.35%**	
63	**Total capital (as a percentage of total risk exposure amount)**	**19.49%**	
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with Article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104(1) CRD, plus combined buffer requirement in accordance with Article 128(6) CRD) expressed as a percentage of risk exposure amount)	9.16%	
65	thereof: capital conservation buffer requirement	2.50%	
66	thereof: countercyclical buffer requirement	0.68%	
67	thereof: systemic risk buffer requirement	0.07%	
EU-67a	thereof: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer		
EU-67b	thereof: additional own funds requirements to address the risks other than the risk of excessive leverage	1.41%	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	8.99%	
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	-	
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	-	
75	Deferred tax assets arising from temporary differences (amount below 17,65% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met)	111	
Applicable caps on the inclusion of provisions in Tier 2			
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	22	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	8	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	93	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)			
80	Current cap on CET1 instruments subject to phase out arrangements	-	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	
82	Current cap on AT1 instruments subject to phase out arrangements	-	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on T2 instruments subject to phase out arrangements	-	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	

Core capital

The regulatory core capital (Tier 1, T1) in accordance with Article 25 CRR consists of common equity tier 1 capital (CET1) and additional tier 1 capital (AT1). It is based on balance sheet equity in accordance with IFRS totalling € 3,365 million, adjusted for regulatory adjustments.

Common equity tier 1 capital

The conditions for Common Equity Tier 1 capital pursuant to Articles 26 to 50 CRR apply as at the disclosure date.

As at 31 December 2023, pbb's subscribed capital (share capital) remained unchanged at around € 380 million (EU CC1, line 1a). The share capital is the capital to which the liability of the shareholders for the liabilities of the corporation towards the creditors is limited. It is divided into 134,475,308 ordinary bearer shares in the form of no-par value shares with a notional interest in the subscribed capital (share capital) of around € 2.83 per no-par value share. As in the previous year 2022, pbb did not hold any treasury shares in the 2023 financial year.

In addition to subscribed capital (share capital), Common Equity Tier 1 capital consists of the capital reserve of € 1,637 million (EU CC1, line 1b), retained earnings of € 1,163 million (EU CC1, lines 2 and EU-5a) and accumulated other comprehensive income of € -112 million (EU CC1, line 3). Common Equity Tier 1 capital before regulatory adjustments amounts to € 3,067 million (EU CC1, line 6).

Common Equity Tier 1 capital (CET1) before regulatory adjustments totalling € 3,067 million is adjusted for regulatory purposes due to various items prescribed in the CRR; a total of € 157 million was deducted (EU CC1, line 28):

> The value adjustments due to the requirements for prudent valuation of assets recognised at fair value amounting to € 4 million are deducted in full from CET1 (EU CC1, line 7).

  When calculating its own funds, pbb Group takes into account the requirements for a prudent valuation of assets recognised at fair value in accordance with Article 34 CRR in conjunction with Article 105 CRR. Article 105 CRR. To determine these additional valuation adjustments, pbb Group applies the simplified approach. Institutions may use this approach if the sum of the absolute value of the assets and liabilities recognised at fair value according to the annual financial statements less offsetting options is below the threshold value of € 15 billion. According to pbb Group's consolidated financial statements (IFRS), this value amounted to € 4.0 billion as of the disclosure date.

> Intangible assets (mainly purchased and internally generated software) totalling € 53 million are deducted from CET1 in accordance with Article 37 CRR in conjunction with Article 36 (1) (b) CRR. Article 36 (1) letter b CRR, € 25 million is deducted from CET1 (EU CC1, line 8).

  An exception to the deduction of intangible assets in accordance with Article 36 (1) letter b CRR applies to prudently measured software assets which are amortised over a regulatory amortisation period of 3 years (but no longer than the amortisation period shown in the balance sheet). pbb Group utilises this regulation for prudently measured software assets in the amount of € 28 million. This software, which is not deducted from CET1, is to be allocated to risk-weighted assets and backed with a 100% risk weighting. In the IRB approach, pbb Group recognises these software assets in the risk position class "Other assets which are not credit obligations".

> Deferred tax assets that do not result from temporary differences (after netting with deferred tax liabilities) are deducted from CET1 in the amount of € 18 million in accordance with Article 38 (3) CRR (EU CC1, line 10). Deferred tax assets of € 111 million resulting from temporary differences are risk-weighted in the credit risk standardised approach, risk position class "Other items".

> The cash flow hedge reserve of € -31 million still included in accumulated other comprehensive income is credited back to CET1 in accordance with Article 33 CRR (EU CC1, line 11: € +31 million).

> Institutions that apply the IRB approach based on internal rating procedures (A-IRB or F-IRB) must treat credit risk adjustments (stages 1 to 3) in accordance with the provisions of Article 159 CRR, Article 62(d) CRR and Article 36(1)(d) CRR. This means that if a value adjustment deficit arises in the portfolio of recognised value adjustments (stages 1 to 3) and provisions in the lending business compared to the expected loss, this must be deducted from CET1. However, specific valuation allowances (stage 3 valuation allowances) for defaulted risk exposures may not be used to cover the expected loss amounts of non-defaulted risk exposures. At the end of 2023, there was a valuation allowance deficit (stage 1 and stage 2 valuation allowances) of € 2 million (EU CC1, line 12).

  By contrast, a maximum of 0.6% of the risk-weighted exposure amounts (RWA) is to be added to supplementary capital (T2). At the end of 2023, an impairment surplus (stage 3 impairments) of € 8 million was added to supplementary capital (line 50).

> The item "Other regulatory adjustments" totalling € -137 million (EU CC1, line 27a) includes the following deductions from CET1:

  - Obligations from bank levies totalling € 49 million. In particular, this includes expenses for collateral for the European bank levy to BaFin as the national resolution authority as well as payments made to the Compensation Scheme of German Banks (statutory deposit guarantee scheme) and the Deposit Protection Fund of private banks at the Association of German Banks (BdB). A deduction obligation results from the ECB's SREP decision.

  - An amount of € 54 million for the minimum cover of non-performing risk positions (NPL backstop).

    pbb Group has loan defaults in the amount of € 45 million, which lead to an NPL backstop in accordance with the minimum cover for non-performing exposures pursuant to Regulation (EU) 2019/630. Articles 47a et seq. of the CRR introduced by this regulation apply to defaulted loans and advances that were extended or increased after 26 April 2019.

    The loan defaults that lead to an NPL backstop in accordance with the ECB addendum amount to € 3 million. The ECB addendum ("Supplement to the ECB Guidance to banks on non-performing loans: supervisory expectations on risk provisioning for non-performing exposures") extended the provisions to defaulted exposures that have defaulted since 1 April 2018 and therefore do not fall under Article 47a et seq. of the CRR mentioned above.

    In addition to the aforementioned regulations, institutions receive SREP notices from the ECB for their exposures that defaulted before 1 April 2018 (legacy portfolio), which contain NPL backstop recommendations in a slightly modified form. The legacy portfolio results in an NPL backstop of € 6 million for pbb Group.

  - Gains and losses from derivative liabilities recognised at fair value resulting from the institution's own credit risk (debt value adjustment, DVA) in the amount of € 4 million. The obligation to deduct the DVA results from Article 33 (1) (c) CRR.

  - As a precautionary measure, pbb has deducted an amount of € 30 million from CET1 in accordance with Article 3 CRR. Article 3 CRR allows institutions to make an additional capital deduction over and above the CRR requirements. Due to the difficult macroeconomic environment and the tense situation on the property markets, pbb has made use of this as a precautionary measure.

In total, pbb Group's Common Equity Tier 1 (CET1) capital amounted to € 2,910 million as of the disclosure date.

Additional core capital

In addition to Common Equity Tier 1 capital (CET1), pbb Group's Tier 1 capital consists of Additional Tier 1 capital (AT1), to which the provisions of Articles 51 to 61 CRR apply.

The additional Tier 1 capital consists of subordinated bearer bonds with a total nominal amount of € 300 million and an initial interest rate of 5.750% p.a., which were issued by pbb in April 2018 and are available for an indefinite period and without redemption incentives. For accounting purposes, the AT1 capital also qualifies as equity in accordance with IFRS as, subject to certain conditions, there is no obligation to repay and service it on an ongoing basis (basically discretionary coupon). It is recognised under the liabilities balance sheet item "Additional equity instruments (AT1)".

In April 2023, a coupon payment of € 17 million was made on the AT1 capital, which reduced retained earnings (EU CC1, line 2). For the new five-year interest period since 28 April 2023, a coupon of 8.474% p.a. applies, based - as stipulated in the bond terms and conditions - on the reference rate applicable on the reporting date (five-year euro mid-swap rate) plus 5.383% p.a.

The bonds do not have a final maturity, but they were regularly callable for the first time on 28 April 2023 and have been callable by pbb every five years since then. In addition, the bonds are callable by pbb for regulatory and tax reasons, in each case subject to the prior approval of the competent supervisory authority. The creditors do not have an ordinary right of cancellation.

The bond terms also provide for a temporary write-down of the nominal amount in the event that the Common Equity Tier 1 ratio (CET1 ratio) falls below the threshold of 7.0%. The threshold of 7.0% relates primarily to the pbb Group in accordance with IFRS. In addition, the threshold also applies at the level of the individual institution in accordance with HGB, provided that pbb is no longer exempted from calculating the regulatory ratios on an individual institution basis. In addition to the aforementioned contractual right to write-down, the competent resolution authority has the (statutory) option of converting the bonds into shares of pbb or writing down the bonds (so-called bail-in) in the event of a crisis at pbb under conditions defined in more detail by law.

The bonds establish direct, unsecured, subordinated liabilities of pbb, which rank pari passu among themselves, but which take precedence over liabilities of pbb from Common Equity Tier 1 instruments. In the event of resolution measures in relation to pbb and in the event of the dissolution, liquidation or insolvency of pbb, the liabilities from the bonds will only be serviced after repayment of the supplementary capital.

No regulatory adjustments were made to the additional Tier 1 capital.

With this issue, pbb Group's additional tier 1 capital (AT1) amounts to € 298 million (nominal amount € 300 million less issue costs of € 2 million).

Supplementary capital

The supplementary capital (T2) of pbb Group consists of longer-term subordinated liabilities to which the provisions of Articles 62 to 65 CRR apply.

All subordinated liabilities are subject to interest at market rates. The issuer is not obliged to make early repayment. They are subordinated to all claims of those creditors who are not also subordinated (in the event of liquidation, insolvency or in the event of other insolvency or other proceedings), but are senior to both the liquidation claims of the shareholders and the claims of the AT1 capital instruments (additional Tier 1 capital). No subsequent restriction of the subordination, term or notice period is possible. Debtor cancellation rights are possible under certain contractual conditions. The original maturities are at least 5 years and are generally between 10 and 20 years. In the event of a crisis at pbb, the competent resolution authority has the (statutory) option to convert the supplementary capital into shares of pbb or to write down the supplementary capital (so-called bail-in) under conditions defined in more detail by law.

No regulatory adjustments were made to supplementary capital.

Supplementary capital (T2) amounted to € 396 million as at the disclosure date, taking into account discounts and amortisation in accordance with Article 64 CRR and after the addition of the excess value adjustment (stage 3 value adjustments) of € 8 million (EU CC1, line 50).

Own funds

pbb Group's regulatory own funds, which are decisive for meeting the regulatory capital requirements and thus for capital backing, amount to a total of € 3,604 million (€ +86 million compared to 30 June 2023). They comprise € 2,910 million in Common Equity Tier 1 capital (€ +135 million compared to 30 June 2023, CET1), € 298 million in Additional Tier 1 capital (AT1) and € 396 million in Tier 2 capital (€ -50 million compared to 30 June 2023; T2).

Earnings after taxes of € 91 million in particular had a positive impact on the development of own funds. Regulatory own funds for the first half of 2023 were calculated in accordance with the regulatory provisions of the CRR without taking into account the interim profit from 1 January to 30 June 2023. The increase in common equity tier 1 (CET1) capital by € 135 million is also due to reduced capital deductions, primarily for intangible assets and the impairment loss in the IRB approach. This was offset by a higher capital deduction for the minimum cover for non-performing risk positions (NPL backstop), among other things.

The decrease in supplementary capital (T2) of € -50 million is primarily due to repayments of subordinated liabilities falling due and reductions in the recognition of subordinated bonds as a result of daily amortisation in accordance with Article 64 CRR.

Reconciliation of regulatory capital and balance sheet equity

In accordance with article 437 letter a CRR, the following table EU CC2 shows the reconciliation of regulatory own funds with the published pbb consolidated balance sheet as of 31 December 2023, in particular the balance sheet equity (IFRS). The table contains cross-references (column c) to the respective regulatory own funds item in table EU CC1.

pbb Group's reported equity (IFRS) amounted to € 3,365 million at the end of 2023 (EU CC2, line 29). More detailed information on the composition of equity according to IFRS and its development can be found in the Annual Report 2023 of pbb Group (published on pbb's website), in Notes "Changes in Equity" (page 95), 24 "Equity" (page 113) and 63 "Equity" (page 140 et seq.).

EU CC2: Reconciliation of regulatory own funds with the balance sheet included in the audited financial statements

All figures in € million		a Balance sheet as in published financial statements under regulatory scope of consolidation [1)] 31.12.2023	c Reference
Assets - Breakdown by asset clases according to the balance sheet in the published financial statements			
1	Cash reserve	2,728	
2	Financial assets at fair value through profit or loss	944	
3	Financial assets at fair value through other comprehensive income	1,475	
4	Financial assets at amortised cost after credit loss allowances	45,228	
5	Positive fair values of hedge accounting derivatives	251	
6	Valuation adjustment from portfolio hedge accounting (assets)	-56	
7	Tangible assets	20	
8	Intangible assets	53	
9	Other assets	68	
10	Current income tax assets	43	
11	Deferred income tax assets	129	
12	**Total assets**	**50,883**	
Liabilities - Breakdown by liability clases according to the balance sheet in the published financial statements			
13	Financial liabilities at fair value through profit or loss	662	
14	Financial liabilities measured at amortised cost	45,913	
15	Subordinated liabilities [2)]	603	
16	Negative fair values of hedge accounting derivatives	789	
17	Valuation adjustment from portfolio hedge accounting (liabilities)	-49	
18	Provisions	117	
19	Other liabilities	68	
20	Current income tax liabilities	18	
21	**Liabilities**	**47,518**	
22	Equity attributable to the shareholders of pbb	3,067	
23	Subscribed capital	380	
24	Additional paid-in capital	1,637	
25	Retained earnings	1,162	
26	Accumulated other comprehensive income	-112	
27	Additional equity instruments (AT1) [2)]	298	
28	Non-controlling interests	-	
29	**Equity**	**3,365**	
30	**Total equity and liabilities**	**50,883**	
Shareholders' equity			
	Common Equity Tier 1 (CET1): Instruments and reserves		
31	Capital instruments and the related share premium accounts	2,017	Reference EU CC1, line 1
32	of which: subscribed capital	380	Reference EU CC1, line1a
33	of which: additional paid-in capital	1,637	Reference EU CC1, line 1b
34	Retained earnings	1,089	Reference EU CC1, lines 2 and EU-5a
35	Accumulated other comprehensive income	-112	Reference EU CC1, line 3
36	Independently reviewed interim profits net of any foreseeable charge or dividend	74	Reference EU CC1, line EU-5a
37	Distribution of a dividend (for information purposes) [3)]	-	
38	**Common Equity Tier 1 (CET1) before regulatory adjustments**	**3,067**	Reference EU CC1, line 6
	Common Equity Tier 1 (CET1): regulatory adjustments		
39	Additional value adjustments (negative amount)	-4	Reference EU CC1, line 7
40	Intangible assets (net of related tax liability) (negative amount)	-25	Reference EU CC1, line 8
41	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	-18	Reference EU CC1, line 10

All figures in € million		a **Balance sheet as in published financial statements under regulatory scope of consolidation [1)]** **31.12.2023**	c **Reference**
42	Fair value reserves related to gains or losses on cash flow hedges	31	Reference EU CC1, line 11
43	Negative amounts resulting from the calculation of expected loss amounts	-2	Reference EU CC1, line 12
44	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-	Reference EU CC1, line 14
45	Other regulatory adjustments to CET1 capital	-137	Reference EU CC1, line 27a
46	**Total regulatory adjustments to Common equity Tier 1 (CET1)**	**-157**	Reference EU CC1, line 28
47	**Common Equity Tier 1 (CET1) capital**	**2,910**	Reference EU CC1, line 29
	Additional Tier 1 (AT1) capital: Instruments and reserves		
48	Capital instruments and the related share premium accounts	298	Reference EU CC1, line 30
49	thereof: classified as equity under applicable accounting standards	298	Reference EU CC1, line 31
50	of which: classified as liabilities under applicable accounting standards	-	Reference EU CC1, line 32
51	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**298**	Reference EU CC1, line 36
	Additional Tier 1 (AT1) capital: regulatory adjustments		
52	Not applicable at pbb	-	
53	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**0**	Reference EU CC1, line 43
54	**Additional Tier 1 (AT1) capital**	**298**	Reference EU CC1, line 44
55	**Tier 1 capital (T1 = CET1 + AT1)**	**3,208**	Reference EU CC1, line 45
	Tier 2 (T2) capital: Instruments and reserves		
56	Capital instruments and the related share premium accounts	388	Reference EU CC1, line 46
57	Credit risk adjustments	8	Reference EU CC1, line 50
58	**Tier 2 (T2) capital before regulatory adjustments**	**396**	Reference EU CC1, line 51
	Tier 2 (T2) capital: regulatory adjustments		
59	Not applicable at pbb	**-**	
60	**Total regulatory adjustments to Tier 2 (T2) capital**	**0**	Reference EU CC1, line 57
61	**Tier 2 (T2) capital**	**396**	Reference EU CC1, line 58
62	**Total capital (TC = T1 + T2)**	**3,604**	Reference EU CC1, line 59

[1)] There are no differences between the regulatory scope of consolidation in accordance with CRR and the accounting scope of consolidation for the IFRS consolidated financial statements as at the disclosure date. Columns a and b of the EU CC2 template have therefore been combined into one column a in accordance with the Pillar 3 framework, Annex 8, point 9.

[2)] Additional Tier 1 capital (AT1) qualifies as equity in accordance with IFRS, as there is no obligation to repay or service it on an ongoing basis. The instruments of supplementary capital (T2) are included in liabilities in the IFRS balance sheet.

[3)] In view of the currently challenging situation on the commercial property markets, and after considering the views of all relevant stakeholders, pbb will not distribute a dividend for the 2023 financial year, thereby strengthening its capital base.

Own funds and eligible liabilities (MREL)

Under the resolution and recovery regime (BRRD Directive; revised as part of the 2019 EU banking package and transposed into national law in Germany by the German Recovery and Resolution Act (SAG)), institutions are obliged to hold liabilities convertible into equity in the amount of the MREL ratio in addition to regulatory capital. The possibility of converting liabilities (bail-in capability) is subject to clear limits. In particular, there is the principle that no creditor may be placed in a worse position than through the regular insolvency proceedings (Principle of No Creditor Worse Off, NCWO). This means, for example, that deposits that are secured by the national deposit protection fund are not eligible for bail-in and are therefore excluded from the conversion.

The Single Resolution Board (SRB) sets institution-specific requirements as part of the annual redefinition of the eligible liabilities and own funds to be held. The leverage ratio exposure amount (LRE) and the total risk exposure amount (TREA) serve as benchmarks for the regulatory minimum requirements. In addition, pbb aims to achieve an MREL ratio of at least 8% in relation to total liabilities and own funds (TLOF). This requirement was significantly exceeded in the 2023 disclosure year with more than € 1.7 billion (2022: € 1.6 billion).

The complete qualitative and quantitative MREL information must be disclosed for the first time as at 1 January 2024, i.e. in the disclosure report as at 31 December 2024, in accordance with Section 51 (3) of the German Recovery and Resolution Act (SAG) and Article 437a CRR in conjunction with point 10 of Regulation (EU) 2021/763 (prudential reporting and disclosure of MREL).

Optional transitional arrangements in accordance with Article 473a CRR

pbb Group still does not apply the optional transitional arrangements pursuant to article 473a CRR (transitional provisions to reduce the impact of the introduction of IFRS 9 on own funds, period of temporary treatment: 1 January 2020 to 31 December 2024) in conjunction with the amending regulation (EU) 2020/873 ("CRR Quick Fix"). Also in previous years, pbb Group did not use the original optional transitional arrangements according to Article 473a CRR in conjunction with the guidelines EBA/GL/2018/01 to mitigate the effects from the introduction of IFRS 9 as of 1 January 2018.

pbb Group also did not apply the exemptions pursuant to Article 468 CRR (temporary treatment of fair value gains and losses not realised in other comprehensive income, period of temporary treatment: 1 January 2020 to 31 December 2022), which expired at the end of 2022.

The own funds, capital ratios and leverage ratios presented in this disclosure report represent the full impact of the introduction of IFRS 9 and the expected credit loss impairment model. The table IFRS 9/Article 468-FL "Comparison of institutions' own funds and capital and leverage ratios with and without application of the transitional provisions for IFRS 9 or similar expected credit losses and with and without application of the transitional treatment under Article 468 CRR" in accordance with the EBA/GL/2020/12 guidelines is not relevant for pbb Group in this respect.

Countercyclical capital buffer

This chapter shows the information on the countercyclical capital buffer for pbb Group in accordance with Article 440 CRR.

Countercyclical capital buffer

The countercyclical capital buffer (CCyB) in accordance with Section 10d of the German Banking Act (KWG) is considered a macroprudential instrument of banking supervision. In particular, it is intended to counteract the risk of excessive credit growth in the banking sector, i.e. in times of excessive credit growth, banks should build up an additional capital buffer - held from common equity tier 1 capital (CET1) - which increases the banks' loss-absorbing capacity in the event of a crisis.

In accordance with Article 140 (4) CRD, the relevant credit exposures for the calculation of the countercyclical capital buffer are all exposure classes of the Standardised Approach to credit risk, with the exception of the exposure classes specified in Article 112 (a) to (f) CRR. In this respect, exposures to central governments or central banks, regional or local authorities, public sector entities, multilateral development banks, international organisations and institutions are not included in the calculation.

Domestic countercyclical capital buffer

The ratio of the domestic countercyclical capital buffer (CCB) can generally amount to 0 to 2.5% of the total risk amount (RWA) in accordance with Section 10d (3) of the German Banking Act (KWG) and is reviewed quarterly by BaFin for its appropriateness and adjusted if necessary. To this end, BaFin evaluates the intensity of the cyclical systemic risk and assesses which ratio of the domestic countercyclical capital buffer is appropriate.

As at the disclosure date of 31 December 2023, the value for Germany was 0.75%. BaFin raised the ratio of the domestic countercyclical capital buffer by 0.75 percentage points with effect from 1 February 2023 with the aim of preventively strengthening the resilience of the German banking system.

Individual institution-specific countercyclical capital buffer

The pbb Group must determine its individual institution-specific countercyclical capital buffer (ICCB) itself. The value of the countercyclical capital buffer applicable for Germany must be included and applied to the total of the relevant credit risk positions which are located in Germany. In addition to the domestic countercyclical capital buffer, foreign countercyclical capital buffers from countries in which receivables of pbb Group are located must also be included. The countercyclical capital buffers applicable there (EU CCyB1, column m) are to be taken into account on a pro rata basis. The institution-specific countercyclical capital buffer for pbb Group thus results from the weighted average of the domestic and foreign capital buffers of those countries in which pbb Group has significant credit risk exposures to the private sector (EU CCyB1: as the sum of the weighted own funds requirement per country in accordance with column l multiplied by the country-specific ACP in % in accordance with column m).

Capital buffer for systemic risks

Also since 1 February 2023, pbb has applied the sectoral systemic risk buffer (SRP) of 2.00% introduced by BaFin in accordance with the "General ruling on the arrangement of a capital buffer for systemic risks pursuant to section 10e KWG". This systemic risk buffer applies to credit risk positions that are collateralised with residential property in Germany (i.e. in Germany) and is also intended to counteract the specific risks on the residential property market that cannot be fully covered by the above-mentioned domestic countercyclical capital buffer. In March 2024, following a review in accordance with Section 10e (2) sentence 3 KWG, BaFin decided to maintain the level of the sectoral systemic risk buffer.

The risk-weighted exposure amounts (RWA) for these loans secured by residential property in Germany amount to € 660 million (30 June 2023: € 612 million), resulting in a capital requirement of € 13 million (i.e. 0.07% of total RWA, see EU KM1, line EU 9a). The own funds requirement for the systemic risk buffer, as well as the institution-specific countercyclical capital buffer, must be held in common equity tier 1 capital (CET1).

Quantitative information on the countercyclical capital buffer

The following tables in accordance with Article 440 (a) and (b) CRR show the amount of the individual institution-specific countercyclical capital buffer (EU CCyB2) for the pbb Group as well as the geographical distribution of the risk positions which are relevant for the calculation of the institution-specific countercyclical capital buffer (EU CCyB1).

The institution-specific countercyclical capital buffer (ICCB) for pbb Group amounted to 0.68% as at the disclosure date (30 June 2023: 0.55%) and thus remains well below the applicable maximum ratio of 2.5%.

The reason for the increase in the ICPP by 0.13 percentage points are increases in countercyclical capital buffers in countries in which pbb Group has credit risk exposures (to the private sector). In the second half of 2023, the responsible supervisory authorities increased the country-specific countercyclical capital buffers for the United Kingdom (2.00%, +1.00 percentage points compared to 30 June 2023), Ireland (1.00%, +0.50 percentage points compared to 30 June 2023), Slovenia (0.00%, +1.00 percentage points compared to 30 June 2023) and the United Kingdom (2.00%, +1.00 percentage points compared to 30 June 2023). June 2023), Slovenia (0.50%, +0.50 percentage points compared to 30 June 2023), Slovakia (1.50%, +0.50 percentage points compared to 30 June 2023) and Romania (1.00%, +0.50 percentage points compared to 30 June 2023). The reduction in the country-specific countercyclical capital buffer for the Czech Republic (2.00%, -0.50 percentage points compared to 30 June 2023) had the opposite effect.

In addition, the country-specific countercyclical capital buffers of Germany (0.75%), France (0.50%), Luxembourg (0.50%), the Netherlands (1.00%) and Sweden (2.00%) - unchanged compared with the end of the first half of 2023 - are taken into account in the calculation of the ICCP. The domestic countercyclical capital buffers of the other countries in which significant risk positions of pbb Group are located amount to 0% or have not been set by the responsible supervisory authority.

The own funds requirement of € 125 million (0.68% of the total risk-weighted exposure amounts) must be held in common equity tier 1 (CET1) capital in accordance with section 10d (1) KWG. For this purpose - as well as for the own funds requirements of the sectoral systemic risk buffer (SRP) and the capital conservation buffer (CEP) - pbb Group has € 2,078 million of common equity tier 1 capital available after complying with the common equity tier 1 capital ratio of 4.5% of the total risk exposure amount.

EU CCyB2: Amount of the institution-specific countercyclical capital buffer

All figures in € million, unless otherwise stated		a
1	Total risk exposure amount [1]	18,495
2	Institution specific countercyclical capital buffer rate (%)	0.68
3	Institution specific countercyclical capital buffer requirement [2]	125

[1] Total risk-weighted assets (RWA) in accordance with EU OV1, column (a).
[2] Own funds requirement for the IAKP, calculated by multiplying line 1 and line 2.

EU CCyB1: Geographical distribution of credit risk exposures material for the calculation of the countercyclical capital buffer

			a	b	c	d	e	f	g	h	i	j	k	l	m
			General credit exposures		Relevant credit exposures - Market risk		Securitisation exposures	Total exposure value [1]	Own fund requirements				Risk-weighted exposure amounts [2]	Own fund requirements weights[3] (%)	Countercyclical buffer rate[4] (%)
All figures in € million, unless otherwise stated			Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for non-trading book		Relevant credit risk exposures - Credit risk	Relevant credit exposures - Market risk	Relevant credit exposures - Securitisation positions in the non-trading book	Total			
10	**Breakdown by country [5]**														
1	(AT)	Austria	398	308	-	-	-	706	16	-	-	16	200	1.23	0.00
2	(AW)	Aruba	13	-	-	-	-	13	-	-	-	-	-	-	-
3	(BD)	Bangladesh	19	-	-	-	-	19	-	-	-	-	1	0.01	-
4	(BE)	Belgium	82	19	-	-	-	101	-	-	-	-	6	0.03	0.00
5	(BM)	Bermuda	13	1	-	-	-	14	-	-	-	-	1	0.01	-
6	(CH)	Switzerland	19	141	-	-	-	159	5	-	-	5	67	0.41	0.00
7	(CZ)	Czech republic	120	471	-	-	-	591	35	-	-	35	442	2.73	2.00
8	(DE)	Germany	549	13,618	-	-	-	14,167	205	-	-	205	2,569	15.84	0.75
9	(ES)	Spain	395	457	-	-	-	853	29	-	-	29	366	2.26	0.00
10	(FI)	Finland	-	402	-	-	-	402	25	-	-	25	311	1.92	0.00
11	(FR)	France	357	3,976	-	-	-	4,333	238	-	-	238	2,970	18.32	0.50
12	(GB)	United Kingdom	2	2,532	-	-	-	2,534	137	-	-	137	1,712	10.56	2.00
13	(GG)	Guernsey													
14	(GH)	Ghana	27	-	-	-	-	27	-	-	-	-	3	0.02	-
15	(HU)	Hungary	-	148	-	-	-	148	7	-	-	7	88	0.54	0.00
16	(IE)	Ireland	80	-	-	-	-	80	-	-	-	-	-	-	1.00
17	(IT)	Italy	-	113	-	-	-	113	7	-	-	7	85	0.52	0.00
18	(JE)	Jersey	26	5	-	-	-	31	3	-	-	3	34	0.21	-
19	(KY)	Cayman Islands	21	-	-	-	-	21	-	-	-	-	-	-	-
20	(LI)	Liechtenstein	-	4	-	-	-	4	-	-	-	-	-	-	0.00

All figures in € million, unless otherwise stated			a	b	c	d	e	f	g	h	i	j	k	l	m
			General credit exposures		Relevant credit exposures - Market risk		Securitisation exposures	Total exposure value [1]	Own fund requirements				Risk-weighted exposure amounts [2]	Own fund requirements weights[3] (%)	Countercyclical buffer rate[4] (%)
			Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for non-trading book		Relevant credit risk exposures - Credit risk	Relevant credit exposures - Market risk	Relevant credit exposures - Securitisation positions in the non-trading book	Total			
10	**Breakdown by country [5]**														
21	(LU)	Luxembourg	126	118	-	-	-	244	13	-	-	13	166	1.03	0.50
22	(NL)	Netherlands													
23	(OM)	Oman	47	-	-	-	-	47	-	-	-	-	-	-	-
24	(PL)	Poland	-	1,947	-	-	-	1,947	115	-	-	115	1,436	8.86	0.00
25	(RO)	Romania	-	133	-	-	-	133	5	-	-	5	64	0.39	1.00
26	(SA)	Saudi Arabia	3	-	-	-	-	3	-	-	-	-	-	-	0.00
27	(SE)	Sweden	-	1,171	-	-	-	1,171	88	-	-	88	1,098	6.77	2.00
28	(SI)	Slovenia	-	63	-	-	-	63	2	-	-	2	29	0.18	0.50
29	(SK)	Slovakia	-	114	-	-	-	114	7	-	-	7	83	0.51	1.50
30	(US)	United States of America	31	4,777	-	-	-	4,807	294	-	-	294	3,679	22.69	0.00
20	**Total**		**2,329**	**31,697**	**0**	**0**	**0**	**34,026**	**1,297**	**0**	**0**	**1,297**	**16,212**	**100.00**	**---**

[1] Exposure at default (EAD), calculated as the sum of the EAD amounts in columns a to e.
[2] Risk-weighted exposure amounts (risk-weighted assets, RWA).
[3] The weighting applied to the countercyclical capital buffer rate in each country, calculated as the sum of the own funds requirements in the respective country (column j) divided by the sum of all own funds requirements (column j, row 020).
[4] Country-specific countercyclical capital buffer (CCyB) rates in accordance with the European Systemic Risk Board (ESRB) and the Bank for International Settlements (BIS).
[5] Country: Location of the debtor, i.e. the debtor's usual place of residence or the location of the assets (real estate) in the case of special financing.

Capital requirements and RWA

This chapter shows information on the own funds requirements and the risk-weighted exposure amounts (risk-weighted assets, RWA) for the pbb Group in accordance with Article 438 (d) to (g) CRR. As a superordinated company of the banking group, pbb is subject to the capital requirements in accordance with Section 10a KWG in conjunction with Article 11 et seq. Article 11 et seq. CRR, pbb is responsible for compliance with the own funds requirements on a summarised basis (regulatory scope of consolidation). The information on the assessment of the adequacy of internal capital in accordance with Article 438 letters a to c CRR is described in the "Economic capital and risk-bearing capacity (ICAAP)" section.

Procedure for capital adequacy

pbb Group applies the provisions of the CRR and is therefore subject to the disclosure requirements of part 8 of the CRR. The provisions of the CRR/CRD form the basis for the minimum amount of own funds and the determination of own funds requirements. In order to comply with the capital requirements, the credit risk (credit risk, counterparty credit risk including CVA risk), market risk, operational risk and settlement risk must be backed with capital. The regulatory ratios are calculated on the basis of IFRS accounting standards.

Credit risk (without counterparty credit risk)

pbb Group currently uses either the Advanced Internal Ratings Based Approach (A-IRB) in accordance with Articles 142 et seq. of the CRR or the Standardised Approach (SACR) in accordance with Articles 111 et seq. of the CRR to determine the own funds requirements for the credit risk of a risk position. CRR or the standardised approach (CRSA) in accordance with Articles 111 et seq. CRR, depending on which exposure class and which portfolio is attributable to the respective exposure.

For some time now, pbb Group has orientated its capital reporting in accordance with Basel IV. In concretising the Basel IV orientation, pbb Group intends to introduce the Foundation Internal Ratings Based Approach (F-IRB) as the relevant model and risk standard for the majority of the portfolio in future, i.e. after the introduction of Basel IV in the European Union (EU), and has informed the ECB accordingly. Until the F-IRB is applied, pbb Group as an IRB bank intends to temporarily use standardised model parameters for calculating RWA.

For its equity investments, pbb Group applies the simple IRBA risk weight for equity exposures in accordance with Article 155 (2) CRR. However, pbb Group does not apply the simple IRBA risk weight for specialised lending exposures in accordance with Article 153 (5) CRR.

As of the disclosure date, pbb Group still does not have any risk positions from securitisations in its portfolio. There are currently no plans for new securitisations of own receivables. The business strategy of pbb Group does not currently define new securitisations as a corporate objective.

Counterparty credit risk

For the calculation of own funds requirements for counterparty credit risk in accordance with Part 3, Title II, Chapter 6 of the CRR (i.e. for derivative transactions), pbb Group applies the standardised approach (SA-CCR) in accordance with Articles 274 et seq. CRR. The Bank's own internal models (IMM) are not currently used.

For the calculation of the additional own funds requirement for OTC derivatives for the risk of a credit valuation adjustment (CVA risk) in accordance with Part 3, Title VI of the CRR, pbb Group uses the standardised method in accordance with Article 384 CRR.

For securities financing transactions (securities lending/repo transactions), pbb Group applies the provisions for credit risk mitigation in accordance with chapter 4 of the CRR, the comprehensive method for taking financial collateral into account in accordance with articles 223 et seq. CRR.

pbb Group uses the risk-sensitive method in accordance with Article 308 CRR to calculate the own funds requirements for contributions to the default fund of a qualified central counterparty.

Market risk

The calculation of capital requirements for market risk in accordance with part 3, title IV of the CRR is carried out in the pbb Group using the standardised approach in accordance with Articles 325 et seq. CRR. The Bank's own internal models (IMA) are currently not used.

Operational risk

pbb Group calculates the capital backing for operational risk in accordance with part 3, title III of the CRR using the standardised approach pursuant to Articles 317 et seq. CRR. The Bank does not currently use its own internal models.

Settlement risk

The own funds requirements for settlement and advance performance risk in accordance with Part 3, Title V of the CRR are calculated in accordance with the rules defined in Articles 378 and 379 CRR.

Quantitative information on own funds requirements and RWA

Table EU OV1 in accordance with Article 438 letter d CRR shows the risk-weighted exposure amounts (RWA) and the associated regulatory minimum own funds requirements broken down by risk type in accordance with Part 3 of the CRR.

Table EU CR10.5 in accordance with Article 438 (e) CRR also shows the risk-weighted exposure amounts, the minimum own funds requirement and further information for equity exposures for which the simple IRBA risk weight is used. The pbb Group applies the simple IRBA risk weight for equity exposures in accordance with Article 155 (2) CRR for its equity investments.

However, pbb Group does not apply the simple IRBA risk weight for specialised lending exposures in accordance with Article 153 (5) CRR. In this respect, the tables EU CR10.1 to EU CR10.4 in accordance with Article 438 (e) CRR are not relevant for the pbb Group.

Also a disclosure of the tables EU INS1 according to article 438 letter f CRR and EU INS2 (financial conglomerate) according to article 438 letter g CRR is still not relevant for pbb Group as of the disclosure date. pbb neither holds a material participation in an insurance company, a reinsurance company or an insurance holding company nor is there an authorisation by the competent supervisory authority pursuant to Article 49 (1) CRR not to deduct such positions in own funds instruments.

EU OV1: Overview of the total risk amounts

		a	b	c
		Risk weighted exposure amounts (RWA) [1]	Risk weighted exposure amounts (RWA) [1]	Total own funds re-quirements
All figures in € million		31.12.2023	30.09.2023	31.12.2023
1	**Credit risk (excluding counterparty credit risk)**	**17,106**	**16,507**	**1,368**
2	thereof: the standardised approach	1,598	1,797	128
3	thereof: the foundation IRB (FIRB) approach	-	-	-
4	thereof: slotting approach	-	-	-
EU 4a	thereof: equities under the simple risk-weighted approach	1.4	0.2	0.1
5	thereof: the advanced IRB (AIRB) approach	15,506	14,710	1,240
6	**Counterparty credit risk**	**363**	**287**	**29**
7	thereof: the standardised approach [2]	154	108	12
8	thereof: internal model method (IMM)	-	-	-
EU 8a	thereof: exposures to a CCP [3]	6	6	0.5
EU 8b	thereof: credit valuation adjustment - CVA	119	128	10
9	thereof: other CCR [4]	84	45	7
15	**Settlement risk**	**0**	**0**	**0**
16	**Securitisation exposures in the non-trading book (after the cap)**	**0**	**0**	**0**
17	thereof: SEC-IRBA approach	-	-	-
18	thereof: SEC-ERBA (including IAA)	-	-	-
19	thereof: SEC-SA approach	-	-	-
EU 19a	thereof: 1.250% / deduction	-	-	-
20	**Position, foreign exchange and commodities risks (market risk)**	**52**	**12**	**4**
21	thereof: the standardised approach	52	12	4
22	thereof: IMA	-	-	-
EU 22a	**Large exposures [5]**	**0**	**0**	**0**
23	**Operational risk**	**975**	**959**	**78**
EU 23a	thereof: basic indicator approach	-	-	-
EU 23b	thereof: standardised approach	975	959	78
EU 23c	thereof: advanced measurement approach	-	-	-
24	Amounts below the thresholds for deduction (subject to 250% risk weight) (For information) [6]	278	261	22
29	**Total**	**18,495**	**17,766**	**1,480**

[1] Risk-weighted exposure amounts (risk-weighted assets, RWA).
[2] Risk positions calculated in accordance with Part 3, Title II, Chapter 6 of the CRR (derivative transactions).
[3] Risk positions for contributions to the default fund of a central counterparty (Eurex Clearing).
[4] Risk positions for securities financing transactions (securities lending/repo transactions).
[5] pbb Group does not maintain a trading book for securities and derivatives portfolios with the intention of generating short-term profits.
[6] Deferred tax assets that rely on future profitability and arise from temporary differences.
The disclosure in this line is for information purposes only; the amount is already recognised in line 1 (credit risk) and line 2 (of which: standardised approach).

EU CR10.5: Equity exposures according to the simple risk weighting approach

Categories	a	b	c	d	e	f
All figures in € million, unless otherwise stated	On-balancesheet exposure [1]	Off-balancesheet exposure [1]	Risk weight [2]	Exposure value [3]	Risk weighted exposure amount [4]	Expected loss amount [5]
Private equity exposures	-	-	190%	-	-	-
Exchange-traded equity exposures	-	-	290%	-	-	-
Other equity exposures	0.4	-	370%	0.4	1.4	-
Total	**0.4**	**0**		**0.4**	**1.4**	**0**

[1] Carrying amount (nominal value for off-balance sheet items).
[2] Simple risk weighting for investment positions.
[3] Exposure at Default (EAD).
[4] Risk-weighted exposure amount (risk-weighted assets, RWA).
[5] Expected loss (EL).

Risk-weighted exposure amounts (RWA)

As at 31 December 2023, pbb Group's risk-weighted exposure amounts to € 18,495 million across all risk types (30 September 2023: € 17,766 million), which corresponds to an increase of € 729 million in the fourth quarter of 2023.

There were RWA increases in credit risk (€ +597 million compared to 30 September 2023, IRB approach and standard approach) due to new business in commercial real estate financing in the fourth quarter of 2023, which significantly exceeded regular and early repayments. In addition, rating downgrades for loan exposures led to an increase in RWA. This was offset by, among other things, netting effects for extensions of property financing as well as limit reductions and changes in the allocation of risk positions to the risk position classes (companies versus small and medium-sized enterprises, SMEs).

The increase in counterparty credit risk (€ +77 million compared to 30 September 2023) is the result of both the increase in the volume of securities financing transactions (repo and reverse repo transactions: € +39 million compared to 30 September 2023) and the interest rate-induced increase in the volume of derivatives (€ +46 million compared to 30 September 2023). The reduction in the CVA risk for OTC derivatives had the opposite effect (€ -9 million compared to 30 September 2023).

The increase in market risk (€ +40 million compared to 30 September 2023) is primarily due to the increase in risk provisions in US dollars (USD) for real estate financing in the USA as well as changes in credit spreads and interest rates for the USD, pound sterling (GBP) and Swedish krona (SEK).

Operational risk, for which the regulatory capital requirement is calculated once a year at the end of the year, increased to € 975 million at the end of 2023 (€ +16 million compared to 30 September 2023).

Capital requirements

The minimum own funds requirement for the aforementioned risk types remained unchanged at 8% of RWA as at 31 December 2023. It totalled € 1,480 million as of the disclosure date (30 September 2023: € 1,421 million). In line with pbb Group's business model with its core business of commercial real estate finance, 95% of the own funds requirement is attributable to credit risk (credit risk and counterparty credit risk including CVA risk), less than 1% to market risk and around 5% to operational risk.

The total capital requirement - including the capital conservation buffer (CCB) of 2.5%, the institution-specific countercyclical capital buffer (ICCB) of 0.68%, the sectoral systemic risk buffer (SRB) of 0.07% and the Pillar 2 capital requirement (P2R) of 2.5% - amounts to 13.75% (EU KM1, line EU 11a). It amounted to € 2,543 million as at the disclosure date (30 September 2023: € 2,441 million).

Equity surplus

The surplus own funds (available own funds less the minimum own funds requirement in accordance with EU OV1) amounted to € 2,124 million as at the disclosure date (30 September 2023: € 1,988 million).

Capital ratios

The information in this chapter on the regulatory minimum capital ratios and regulatory SREP requirements for minimum capitalisation supplements the information in the chapters "Own funds" (Article 437 CRR) and "Economic capital and risk-bearing capacity (ICAAP)" (Article 438 CRR).

Regulatory minimum capital ratios

The CRR together with the CRD form the basis for determining the regulatory capitalisation and the minimum capital ratios. According to its regulations, in 2023 the Common Equity Tier 1 ratio (CET1 ratio: Common Equity Tier 1 divided by RWA) may not fall below 4.5%, the Tier 1 ratio (T1 ratio: Tier 1 divided by RWA) may not fall below 6.0% and the total capital ratio (own funds ratio; own funds divided by RWA) may not fall below 8.0%.

pbb is responsible for compliance with the capital ratios on a combined basis as the parent company of the banking group within the meaning of section 10a KWG in conjunction with Article 11 et seq. Article 11 et seq. CRR is responsible. The requirements regarding the regulatory capital ratios were met at all times in 2023. At the end of 2023, the capital ratios were as follows (see EU CC1, lines 61 to 63)

- Common equity tier 1 ratio (CET1 ratio): 15.7% (30 June 2023: 16.0%)
- Core capital ratio (Tier 1 ratio): 17.3% (30 June 2023: 17.8%)
- Total capital ratio (own funds ratio): 19.5% (30 June 2023: 20.3%).

They are therefore well above the regulatory requirements. The decline in capital ratios in the second half of 2023 is due in particular to the increase in risk-weighted exposure amounts (RWA: € +1,198 million), primarily as a result of new business in commercial property financing, and the only slight increase in regulatory capital (€ +86 million) in this period.

Disclosure in accordance with Article 437 letter f CRR is not relevant for pbb Group, as pbb applies the provisions of the CRR.

SREP

pbb Group also complied with the minimum capitalisation requirements of the ECB's Supervisory Review and Evaluation Process (SREP), which go beyond the existing regulatory requirements, at all times during the 2023 financial year.

The aim of the SREP is to comprehensively analyse the institutions supervised by the ECB. This includes an assessment of the business model, risk and corporate governance, the risk situation as well as capitalisation and liquidity. Based on the results of the analysis and benchmark comparisons, the ECB can issue requirements for the minimum capitalisation or liquidity of the institution that go beyond the existing supervisory requirements.

CET1 minimum ratio and total capital requirement

As a key result of the SREP, pbb had to maintain a minimum CET1 ratio of 8.4% in the 2023 financial year (excluding the countercyclical capital buffer, which varies from country to country and therefore from portfolio to portfolio, and the sectoral systemic risk buffer, together 0.75% as at 31 December 2023). This requirement consists of a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (Pillar 2 Requirement, P2R: 2.5%) and the capital conservation buffer (CCB: 2.5%), whereby around 1.4% (56.25% of the P2R) of the Pillar 2 capital requirement must be held in common equity tier 1 capital (CET1) and around 1.9% (75.00% of the P2R) in tier 1 capital.

In addition to the CET1 minimum ratio, pbb had to fulfil a total capital requirement of 13.0% in 2023 (excluding the countercyclical capital buffer, which varies by country and therefore by portfolio, and the sectoral systemic risk buffer). It is made up of a Pillar 1 minimum capital requirement (8.0%), a Pillar 2 capital requirement (2.5%) and the capital conservation buffer (2.5%).

The applicable CET1 minimum capital requirement also represents the threshold below which the calculation of a maximum distributable amount (MDA) is mandatory. This generally limits distributions on CET1 capital, new performance-related remuneration and interest payments on additional tier 1 capital (AT1 capital).

SREP requirement since 1 January 2024

The Pillar 2 capital requirement notified to pbb in the ECB's SREP letter dated 8 December 2023 and applicable since 1 January 2024 is 3.0%. As a result, a minimum CET1 ratio of 8.69% (excluding the countercyclical capital buffer, which varies from country to country and therefore from portfolio to portfolio, and the sectoral systemic risk buffer) must be maintained since this date, which, in addition to the Pillar 2 capital requirement (3.0%), is made up of the Pillar 1 minimum capital requirement (4.5%) and the capital conservation buffer (2.5%). Of the Pillar 2 capital requirement, 56.25 % of the P2R (around 1.7%) must be held in common equity tier 1 capital (CET1) and 75.00% of the P2R (around 2.3%) in tier 1 capital.

In addition, pbb has had to meet a total capital requirement of 13.5% since 1 January 2024 (excluding the countercyclical capital buffer, which varies by country and therefore by portfolio, and the sectoral systemic risk buffer). It is made up of the Pillar 1 minimum capital requirement (8.0%), the Pillar 2 capital requirement (3.0%) and the capital conservation buffer (2.5%).

Leverage ratio

This chapter shows the information for the pbb Group in accordance with Article 451 CRR on the leverage ratio and on monitoring and managing the risk of excessive leverage.

In accordance with Article 429 (2) CRR, the leverage ratio as a non-risk-based capital requirement is the ratio of an institution's capital measure (Tier 1 capital) to its total exposure measure and is expressed as a percentage. As a non-risk-sensitive ratio, it complements the risk-based view of capital requirements and capital ratios. The aim is to limit the increase in leverage in the banking sector, to reduce the risk of a destabilising build-up of debt that can damage the financial system and the economy and to supplement the risk-based requirements with a simple, non-risk-based safety mechanism.

In accordance with Article 92 (1) CRR, institutions must comply with a binding leverage ratio of at least 3% at all times. pbb Group met this requirement at all times in the financial year 2023.

Total exposure measure

The CRR forms the basis for determining the leverage ratio as a measure of overall risk exposure. Accordingly, its calculation is generally based on the balance sheet carrying amount as the relevant measure of assets. Specific regulatory metrics apply to derivatives and securities financing transactions (securities lending/repo transactions). In addition, the total exposure measure takes into account off-balance sheet risk positions.

Derivatives

The exposure values of the leverage ratio for derivatives are determined on the basis of the regulatory standardised approach (SA-CCR). The risk position values in accordance with the standardised method take into account, among other things, margin agreements, collateral and maturities of derivative transactions, the minimum transfer amount, current replacement costs, netting and a general factor of 1.4.

Securities financing transactions

The risk position values of the leverage ratio for securities financing transactions include the gross receivables from securities financing transactions that can be offset against liabilities from securities financing transactions to the same counterparty, provided certain conditions are met. In addition to the gross receivables from securities financing transactions, a surcharge is included for the counterparty credit risk from securities financing transactions.

Balance sheet risk positions

The risk position values of the leverage ratio for other balance sheet items (excluding derivatives and securities financing transactions) include the carrying amount of the respective items as well as regulatory adjustments for items that are deducted when determining the regulatory core capital (Tier 1).

Off-balance sheet risk positions

The risk position values of the leverage ratio for off-balance sheet risk positions take into account the weighting factors (credit conversion factors, CCF) from the standardised approach for credit risk of 0%, 20%, 50% or 100% depending on the risk category, with a lower limit of 10%.

Quantitative information on the leverage ratio

The following tables EU LR1-LRSum, EU LR2-LRCom and EU LR3-LRSpl pursuant to Article 451 (1) (a) to (c) CRR and Article 451 (3) CRR show a breakdown of the total exposure measure, a reconciliation of this measure with the assets of the published pbb Group balance sheet and the leverage ratio for the pbb Group.

The leverage ratio for pbb Group (EU LR2-LRCom, line 25) amounted to 6.2% as at the disclosure date (30 June 2023: 6.3%) and was thus well above the minimum requirement. The slight decrease of 0.1 percentage points in the second half of 2023 is due in particular to the increase in the total exposure measure (€ +2,927 million compared to 30 June 2023), primarily as a result of the increase in on-balance sheet exposures (excluding derivatives and securities financing transactions), and the only slight increase in Tier 1 capital (€ +136 million, T1) in this period.

The ECB has not imposed an additional own funds requirement (as a percentage of the total exposure measure) for the risk of excessive leverage (REL) in accordance with Article 104 (1) (a) CRD on pbb (Pillar 2 capital requirement, P2R: 0%).

EU LR1-LRSum: Summary reconciliation between recognised assets and risk positions for the leverage ratio

All figures in € million		a Applicable amount
1	**Total assets as per published financial statements [1)]**	**50,883**
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation [2)]	-
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	-
4	(Adjustment for temporary exemption of exposures to central bank (if applicable))	-
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with point (i) of point (i) of Article 429a(1) CRR)	-
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	-
7	Adjustment for eligible cash pooling transactions	-
8	Adjustments for derivative financial instruments [3)]	-379
9	Adjustment for securities financing transactions (SFTs) [4)]	131.3
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures) [5)]	1,209
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	-
EU-11a	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-
EU-11b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with point (j) of Article 429a(1) CRR)	-
12	Other adjustments [6)]	-323
13	**Leverage ratio total exposure measure**	**51,521**

[1)] Line 1: Total assets (balance sheet total) of pbb's consolidated financial statements (IFRS).
[2)] Line 2: There are no differences between the regulatory scope of consolidation and the accounting scope of consolidation for the pbb consolidated financial statements (IFRS) as of the disclosure date.
[3)] Line 8: Difference between the carrying amount (IFRS) of the derivatives and the regulatory exposure at risk (EAD).
[4)] Line 9: Difference between the carrying amount (IFRS) of securities financing transactions (securities lending/repo transactions) and the regulatory exposure at risk (EAD).
[5)] Line 10: Addition of off-balance sheet risk positions after taking into account the credit conversion factors (CCF) from the standardised approach to credit risk.
[6)] Line 12: Other adjustments primarily include cash collateral provided by pbb in the derivatives business.

EU LR2-LRCom: Standardised disclosure of the leverage ratio

All figures in € million, unless otherwise stated		a CRR leverage ratio exposures 31.12.2023	b CRR leverage ratio exposures 30.06.2023
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	49,860	47,504
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-1,103	-1,213
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	-	-
5	(General credit risk adjustments to on-balance sheet items)	-	-
6	(Asset amounts deducted in determining Tier 1 capital)	-100	-124
7	**Total on-balance sheet exposures (excluding derivatives and SFTs)**	**48,657**	**46,166**
Derivative exposures			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	92	68
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	-	-
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	274	287
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	-	-
EU-9b	Exposure determined under Original Exposure Method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	-	-
EU-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-
EU-10b	(Exempted CCP leg of client-cleared trade exposures) (Original exposure method)	-	-
11	Adjusted effective notional amount of written credit derivatives	-	-
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-
13	**Total derivatives exposures**	**366**	**354**
Securities financing transaction (SFT) exposures			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	1,158	2,368
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-1,565
16	Counterparty credit risk exposure for SFT assets	131	105
EU-16a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	-	-
17	Agent transaction exposures	-	-
EU-17a	(Exempted CCP leg of client-cleared SFT exposure)	-	-
18	**Total securities financing transaction exposures**	**1,289**	**907**
Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	2,288	2,267
20	(Adjustments for conversion to credit equivalent amounts)	-1,079	-1,101
21	(General provisions associated with off-balance sheet exposures deducted in determining Tier 1 capital)	-	-
22	**Off-balance sheet exposures**	**1,209**	**1,166**
Excluded exposures			
EU-22a	(Exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-	-
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a (1) CRR (on and off balance sheet))	-	-
EU-22c	(Excluded exposures of public development banks (or units) - Public sector investments)	-	-
EU-22d	(Excluded exposures of public development banks (or units) - Promotional loans)	-	-
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))	-	-
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	-	-

All figures in € million, unless otherwise stated		a **CRR leverage ratio exposures** **31.12.2023**	b **CRR leverage ratio exposures** **30.06.2023**
EU-22g	(Excluded excess collateral deposited at triparty agents)	-	-
EU-22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a(1) CRR)	-	-
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	-	-
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	-	-
EU-22k	**(Total exempted exposures)**	**0**	**0**
Capital and total exposure measure			
23	**Tier 1 capital**	**3,208**	**3,072**
24	**Leverage ratio total exposure measure**	**51,521**	**48,594**
Leverage ratio			
25	**Leverage ratio**	**6.2**	**6.3**
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	6.2	6.3
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	6.2	6.3
26	Regulatory minimum leverage ratio requirement (%)	3.0	3.0
EU-26a	Additional own funds requirements to address the risk of excessive leverage (%) [1]	-	-
EU-26b	of which: to be made up of CET1 capital	-	-
27	Leverage ratio buffer requirement (%)	-	-
EU-27a	Overall leverage ratio requirement (%) [2]	3.0	3.0
Choice on transitional arrangements and relevant exposures			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	fully implemented	fully implemented
Disclosure of mean values			
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable 6)	638	2,526
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables 6)	1,158	802
30	Total exposures (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	51,002	50,318
30a	Total exposures (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	51,002	50,318
31	Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables) (%)	6.3	6.1
31a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables) (%)	6.3	6.1

[1] Row EU-26a: Additional own funds requirement imposed by the competent authority (ECB) to mitigate the risk of excessive leverage.
[2] Line EU-27a: Sum of lines 26 and EU-26a. Row 27 only applies to G-SRIs and is therefore not relevant for pbb.

EU LR3-LRSpl: Breakdown of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

All figures in € million		a CRR leverage ratio exposures
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**48,757**
EU-2	Trading book exposures [1)]	-
EU-3	Banking book exposures, thereof:	48,757
EU-4	Covered bonds	328
EU-5	Exposures treated as sovereigns	13,051
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	2,181
EU-7	Institutions	1,271
EU-8	Secured by mortgages of immovable properties	29,246
EU-9	Retail exposures	-
EU-10	Corporate	1,272
EU-11	Exposures in default	1,097
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	311

[1)] pbb Group does not maintain a trading book for securities and derivatives portfolios with the intention of generating short-term profits.

Procedure for monitoring the risk of excessive indebtedness

In line with its business structure and business model as well as its business and risk strategy, pbb Group has implemented formal procedures and regulations in order to be able to assess the risk of excessive indebtedness. In particular, as part of the recovery plan (in accordance with the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, SAG)), pbb Group has defined a set of selected indicators tailored to the business and risk situation, which enables it to identify and implement suitable options for action in good time. In addition to the leverage ratio and capital ratios, these indicators also include indicators relating to liquidity (including asset encumbrance and the medium and longer-term funding requirements (NSFR)), profitability and portfolio quality, as well as market-based and macroeconomic indicators.

The leverage ratio is calculated on a monthly basis and, like the other indicators, is an integral part of pbb Group's risk management system. Both the leverage ratio and the other indicators are subject to an early warning threshold and a restructuring threshold in order to be able to recognise any shortfall at an early stage. The aim is to enable pbb Group to initiate suitable countermeasures promptly if the early warning threshold is not reached. The status of all indicators is regularly monitored and reported to the Management Board, the Supervisory Board and the banking supervisory authorities. Ongoing monitoring of the leverage ratio includes both its numerator (Tier 1 capital) and its denominator (the total exposure measure). The Management Board of pbb is informed about the leverage ratio on a monthly basis as part of the Flash Report and on a quarterly basis as part of the Management Report and the Recovery Plan Report. In addition, the leverage ratio is included in pbb Group's capital and multi-year planning.

Encumbered and unencumbered assets

This chapter shows the information pursuant to Article 443 CRR on the encumbered and unencumbered assets as well as the material sources of encumbrance of pbb Group. The amounts in tables EU AE1 to EU AE3 are calculated as median values based on the quarterly data (quarter-end values) of the regulatory asset encumbrance report for the financial year 2023.

Encumbrance of assets

An asset is deemed to be encumbered if it has been pledged as collateral or if it is the subject of some form of agreement on the provision of collateral, security or the granting of loan collateral for a transaction from which it cannot be readily withdrawn. Any encumbrance of an asset is caused by a collateral requirement, which is usually caused by a transaction on the liabilities side of the balance sheet (refinancing side).

pbb Group's asset encumbrance results primarily from its business model, with the Pfandbrief as the most important refinancing instrument. pbb Group specialises in commercial real estate finance. Loans extended are largely refinanced via the Pfandbrief market. To refinance the real estate business eligible as cover pool, pbb issues Mortgage Pfandbriefe collateralised by real estate liens. The outstanding volume of Mortgage Pfandbriefe amounted to around € 16.9 billion (nominal) as at 31 December 2023. With an outstanding Pfandbrief volume totalling € 25.6 billion (nominal), i.e. including Public Sector Pfandbriefe of € 8.7 billion collateralised by claims on the public sector, pbb is one of the largest issuers in terms of outstanding volume, and is therefore also an important issuer of Pfandbriefe in Europe.

pbb Group's assets as at 31 December 2023 (median) amounted to € 50.3 billion (31 December 2022: € 54.7 billion), of which € 31.6 billion or 62.8% (31 December 2022: € 34.1 billion or 62.4%) were encumbered. pbb Group's asset encumbrance is essentially unchanged over the course of 2023 and is slightly higher than at the end of 2022.

The other assets listed in table EU AE1 primarily comprise loans and credits (around 98%) and derivatives (around 2%), most of which are encumbered. They also include unencumbered assets such as tax assets and other tangible (property, plant and equipment such as operating and office equipment and rights of use to leased buildings) and intangible (such as purchased and internally generated software) assets, which account for less than 1% and are generally not available for encumbrance.

Exposure structure within pbb Group

Within pbb Group, this burden is exclusively attributable to pbb, in which all strategic business activities of pbb Group are bundled.

Supervisory and accounting scope of consolidation

As of the disclosure date, there are no differences between the regulatory scope of consolidation of pbb Group, which is used as the basis for disclosing the asset encumbrance, and the accounting scope of consolidation for accounting purposes (IFRS).

Mismatches with regard to the accounting framework (IFRS)

There are no mismatches between assets deposited and transferred as collateral in accordance with the accounting framework applied by pbb Group, the International Financial Reporting Standards (IFRS), on the one hand, and the assets recognised as encumbered for regulatory purposes on the other. The deposit or transfer of assets in accordance with IFRS also entails their encumbrance.

Significant positions in foreign currency

As of the disclosure date, pbb Group has one significant currency in accordance with article 415 (2a) CRR, the foreign currency US dollar (USD), whose aggregated liabilities amount to at least 5% of total liabilities. As at 31 December 2022, no foreign currency accounted for more than 5% of aggregated liabilities.

The charges in USD mainly result from the issue of covered bonds (Pfandbriefe issued). In total, the sources of encumbrance in USD amount to € 2,706 million, of which € 2,573 million is attributable to covered bonds issued and € 133 million to securities financing transactions. The volume of encumbered assets in USD totalled € 3,148 million as at the disclosure date, of which € 3,018 million was attributable to loans and credits as well as bonds in the cover pool and € 130 million to securities financing transactions (repo transactions).

Sources of exposure

The main source of encumbrance of pbb Group's assets continues to be the Pfandbrief (81% share). In particular, the issue of mortgage Pfandbriefe to refinance the property business eligible for the cover pool results in a charge on the loans and securities in the mortgage cover pool.

In addition to the issue of Pfandbriefe, derivative financial instruments (5% share) and securities financing transactions (repo transactions and the ECB's TLTRO III programme, together 14% share) are further sources of encumbrance on assets. With regard to the TLTRO III programme, pbb repaid a further tranche of € 1.8 billion at the end of June 2023, leaving only a residual liability of € 0.9 billion until 2024.

Mortgage bonds

As a specialist bank for financing investments in commercial real estate, pbb issues Mortgage Pfandbriefe collateralised by mortgage liens. These Pfandbriefe are regularly issued on the international capital market in benchmark format or as private placements. In line with the lending business on the assets side, pbb offers investors Pfandbriefe in various maturities and currencies, with a focus on EUR, GBP, USD and SEK.

The issue of Pfandbriefe is subject to the provisions of the German Pfandbrief Act (PfandBG) with its high standards of investor protection. Due to its high legal standards, Pfandbriefe have proven to be safer than average in the past. The security mechanisms of the Pfandbrief Act take effect, among other things, through the so-called preferential insolvency right for Pfandbrief creditors. In the event of the insolvency of a pfandbrief bank, the cover pools that collateralise the pfandbriefe are initially available to the pfandbrief creditors alone to satisfy their claims. Only when the pfandbrief creditors have been fully satisfied are any remaining cover pools available to the insolvency creditors for satisfaction.

Pfandbrief banks must report quarterly on the composition and structure of their cover pools, the so-called cover pool. The publications in accordance with the Pfandbrief Act can be found on pbb's website under Investors / Mandatory Publications / Publications in accordance with section 28 of the Pfandbrief Act. Further information on the mortgage and public sector Pfandbriefe issued by pbb as well as the cover pools can be found on pbb's website under Investors / Debt Investors / Pfandbriefe.

Overcollateralisation of Pfandbriefe

The Pfandbrief Act (PfandBG) stipulates a nominal and net present value over-collateralisation of 2.0% for mortgage Pfandbriefe and public sector Pfandbriefe. This means that the nominal and cash value of the respective cover pool is always at least 2.0% higher than the nominal and cash value of all Pfandbriefe issued on this cover pool, whereby the cover assets may not be used twice for the nominal and cash value over-collateralisation.

The rating agencies also order additional over-collateralisation, depending on the quality of the cover pool and the target Pfandbrief rating. pbb's Mortgage Pfandbriefe and Public Pfandbriefe were rated Aa1 by the rating agency Moody's as at 31 December 2023. In order to maintain this rating, pbb must provide at least 10.5% (Mortgage Pfandbriefe) and 9.0% (Public Pfandbriefe) present value over-collateralisation.

In fact, the over-collateralisation of the mortgage Pfandbriefe as at 31 December 2023 was 23.4% nominal and 25.4% net present value. For the public sector Pfandbriefe, pbb provided 9.6% nominal and 10.6% net present value over-collateralisation. The over-collateralisation was thus well above the requirements of the rating agencies and the legislator.

pbb regularly publishes the current over-collateralisation and the voluntary over-collateralisation required by Moody's on its website under Investors / Mandatory Publications / Publications in accordance with section 28 of the Pfandbrief Act or Investors / Ratings / Moody's Reports.

In order to manage the liquidity position and optimise the quality and cash flows of the cover pools, pbb also holds more overcollateralisation than required by law or desired by the rating agencies.

Derivatives and securities financing transactions

Derivatives are primarily used at pbb Group to hedge market risks resulting from changes in interest rates and exchange rates, for example. These hedging transactions are matched by underlying transactions of asset or liability items. In this respect, the hedging of interest rate and currency risks is aimed at reducing or avoiding market risks. The counterparties in the derivatives business are primarily OECD credit institutions or Eurex Clearing. In addition, pbb Group provides derivatives for property and public-sector clients in order to be able to specifically hedge the market risks of commercial property financing, for example.

The use of securities lending/repo transactions serves the purpose of short-term liquidity management and is also a key source of collateralised refinancing for pbb. The counterparties are primarily OECD credit institutions or Eurex Repo.

Business with both derivatives and securities lending/repo transactions is usually concluded by means of standardised bilateral netting agreements, which serve to minimise the legal risk as well as the economic and regulatory credit risk and enable the offsetting of mutual risks (netting). As part of the netting process, the credit risk is reduced to a single net claim against the contractual partner. Similar to the netting agreements, pbb Group also enters into standard market collateral agreements with certain business partners in addition to the netting agreements in order to collateralise the net receivable/liability resulting after netting. Detailed information on this can be found in the chapters "Credit Risk Mitigation Techniques" and "Counterparty Credit Risk".

Quantitative disclosures on the encumbrance of assets

The following tables EU AE1 to EU AE3 show a breakdown of the encumbered and unencumbered assets and the corresponding sources of encumbrance for the pbb Group in accordance with Article 443 CRR. The amounts are calculated as median values, based on the quarterly data (quarter-end values) of the financial year 2023. pbb Group has expanded both table EU AE1 and table EU AE3 to include additional thereof items (such as loans and advances, derivatives or Pfandbriefe issued) which are of material importance for the business and financing model of pbb Group and thus for the encumbrance of its assets.

EU AE1: Encumbered and unencumbered assets

		010	030	040	050	060	080	090	100
		Carrying amount of encumbered assets		**Fair value of encumbered assets**		**Carrying amount of unencumbered assets**		**Fair value of unencumbered assets**	
All figures in € million			**thereof notionally eligible EHQLA and HQLA [1)]**		**thereof notionally eligible EHQLA and HQLA [1)]**		**thereof EHQLA and HQLA [1)]**		**thereof EHQLA and HQLA [1)]**
010	**Assets of the disclosing institution**	**31,598**	**2,534**	----	----	**18,726**	**2,188**	----	----
030	Equity instruments	-	-	-	-	-	-	-	-
040	Debt securities	3,556	2,534	3,556	2,534	2,420	2,188	2,331	2,188
050	of which: covered bonds	235	-	235	-	77	-	77	-
060	whereof: securitisations	-	-	-	-	-	-	-	-
070	of which: issued by general governments	2,867	2,164	2,867	2,164	1,749	1,665	1,750	1,665
080	of which: issued by financial corporations	916	683	916	683	552	362	510	362
090	of which: issued by non-financial corporations	-	-	-	-	-	-	-	-
120	Other assets	28,058	-	----	----	16,582	-	----	----
130	thereof: loans and advances	27,339	-	----	----	16,334	-	----	----
140	thereof: derivatives	752	-	----	----	9	-	----	----

1) EHQLA: Assets of extremely high liquidity and credit quality, "Level 1 assets" (Extremely high quality liquid assets)
HQLA: Assets of high liquidity and credit quality, "Level 2 A/B assets" (High quality liquid assets).
2) Including loans that can be cancelled at any time (repayable on demand), such as balances at central banks and sight deposits.

EU AE2: Collateral received and own debt securities issued

		010	030	040	060
		Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
All figures in € million			thereof notionally eligible EHQLA and HQLA [1]		thereof EHQLA and HQLA [1]
130	**Collateral received by the disclosing institution**	**0**	**0**	**0**	**0**
140	Loans on demand	-	-	-	-
150	Equity instruments	-	-	-	-
160	Debt securities	-	-	-	-
170	of which: covered bonds	-	-	-	-
180	whereof: securitisations	-	-	-	-
190	of which: issued by general governments	-	-	-	-
200	of which: issued by financial corporations	-	-	-	-
210	of which: issued by non-financial corporations	-	-	-	-
220	Loans and advances other than loans on demand	-	-	-	-
230	Other collateral received	-	-	-	-
240	**Own debt securities issued other than own covered bonds or securitisations**	**0**	**0**	**0**	**0**
241	**Own covered bonds and securitisations issued and not yet pledged**	**----**	**----**	**0**	**0**
250	**Total collateral received and own debt securities issued**	**31,598**	**2,534**	**----**	**----**

[1] EHQLA: Assets of extremely high liquidity and credit quality, "Level 1 assets" (Extremely high quality liquid assets)
HQLA: Assets of high liquidity and credit quality, "Level 2 A/B assets" (High quality liquid assets).

EU AE3: Load sources

All figures in € million		010 Matching liabilities, contingent liabilities or securities lent	030 Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
010	**Carrying amount of selected financial liabilities**	**27,895**	**31,598**
020	thereof: derivatives [1]	1,704	752
030	thereof: deposits [2]	3,147	2,026
040	of which: debt securities issued [3]	23,007	29,068
050	thereof: other sources of encumbrance [4]	-	-

[1] Derivatives including financial collateral.
[2] Repurchase agreements (TLTRO programme of the ECB and repo transactions).
[3] Covered bonds issued (Pfandbriefe).
[4] For example, securities lending transactions.

Risk management and risk-orientated overall bank management

Declarations of the Management Board

In accordance with the requirements of section 91 (2) of the AktG and section 25a of the KWG, a Group-wide risk management and risk control system has been set up for pbb Group which, among other things, enables uniform risk identification, risk measurement and risk limitation. In accordance with section 2a (2) KWG, pbb utilises the exemption from the requirements of section 25a (1) sentence 3 nos. 1, 2 and 3 letters b and c KWG with regard to the risk controlling function at the level of the individual institution.

The following declarations pursuant to Article 435 (1) letters e and f CRR were approved by the Management Board of pbb as part of the approval of this Disclosure Report.

Declaration on the adequacy of risk management procedures

The information pursuant to article 435 (1) letters a to f CRR regarding the risk management objectives and policies as well as the risk management strategy and procedures of pbb Group are described for the individual risk types in this Disclosure Report as well as in the Annual Report 2023 (Risk and Opportunity Report). The Annual Report 2023 is published on pbb's website under Investors / Financial Reports and Other Publications.

The Management Board of pbb considers the existing Group-wide risk management and risk controlling system to be appropriate and effective for the business and risk profile and the business and risk strategy of pbb Group. pbb assumes that the methods, models and processes implemented in pbb Group are suitable at all times for ensuring risk management and risk controlling in line with the business and risk strategy as well as the risk profile.

Declaration of risk

The risk statement describes the general risk profile of pbb Group associated with the business strategy. The Management Board of pbb assures to the best of its knowledge that the internal risk management procedures used in pbb Group are suitable to always provide a comprehensive picture of the risk profile of pbb Group and to ensure its risk-bearing capacity and solvency at all times in a sustainable manner.

Strategic business areas

pbb's strategic business segment is Real Estate Finance (REF) with a focus on Pfandbrief-eligible business. The business segment is supplemented by a Non-Core (NC) segment, which comprises Public Investment Finance (PIF) and the Value Portfolio (VP), but is no longer considered strategic for pbb Group. Geographically, the focus is on Europe and the USA.

In commercial real estate finance, the product range is primarily aimed at professional national and international real estate investors, such as property companies, institutional investors and real estate funds as well as, particularly in Germany, medium-sized companies and regionally oriented clients. pbb targets more complex transactions with medium to large financing volumes. The properties financed are mainly office buildings, residential properties, retail properties and logistics properties. Other types of property are financed as portfolio additions.

The main core markets in Europe are Germany, France, the United Kingdom, the Nordic countries, individual Central and Eastern European countries, Spain and Benelux. In the USA, pbb concentrates mainly on the metropolitan regions of New York, Washington D.C., Boston, Chicago, San Francisco, Seattle and Los Angeles. Business potential outside the focal markets is regularly reviewed without fundamentally changing the business focus.

Here, pbb offers both local and cross-border financing expertise. The majority of the financing extended relates to investment loans, i.e. loans for the acquisition or follow-up financing of existing properties with existing cash flows. Financing for property development measures (development financing) is of supplementary importance and also includes the property development business in Germany.

In addition to the portfolio of the strategic business segment REF, pbb has a non-strategic portfolio, the so-called Non-Core Portfolio. In this portfolio, the previously strategic Public Investment Finance portfolio was merged with the Value Portfolio, which consists almost entirely of non-dedicated financing to the public sector (budget financing). The Non-Core business segment thus combines all non-strategic public sector financing as well as past transactions with public-private partnerships and export credit financing. pbb does not enter into any new business in this segment. The portfolio is essentially refinanced at matching maturities. It generates interest income and matures in accordance with the contractual maturities. Where economically reasonable and viable, pbb also utilises potential for a faster reduction by means of portfolio or individual sales.

Business strategy

pbb Group's business strategy is geared towards continuous value-adding business success. The assessment and appropriate pricing of risk in the lending business on the one hand, and access to the refinancing markets with adequate conditions on the other, are decisive for business success. Another key success factor is the management of the existing portfolio, with the aim of recognising changing risks at an early stage and mitigating them by taking appropriate measures. For the financial years 2023 to 2025, pbb's Management Board has set itself the objective of consolidating pbb Group's earnings power as a dividend-bearing security. In terms of earnings, the strategic focus is particularly on the business activities in the core REF segment described above. By consistently focussing on commercial real estate finance, pbb has initiated further strategic business areas in 2023 in order to increasingly diversify the business model within this segment over the coming years, and to lay a foundation for future earnings growth and higher profitability. The cornerstone of both the core business and new strategic initiatives remains pbb's risk-conservative approach, based on pbb's expertise in its markets.

Risk strategy

In line with the business strategy, pbb Group's risk strategy defines the strategic risk orientation. Whilst accepting the inherent existential threats arising from the business objectives, the overall risk strategy takes into account exogenous factors, such as risks from the macroeconomic environment and new regulatory requirements, and endogenous influencing factors, in particular the results of the annual risk inventory. As part of the risk inventory, all material risks arising from our business activities from an economic perspective are identified. Based on the results of the 2023 risk inventory, credit risk, market risk, liquidity and funding risk, operational risk, business and strategic risk, ESG risk, property risk, pension risk and central counterparty risk, including all associated sub-risk types, are classified as material.

Risk appetite

The risk appetite defined in the risk strategy describes the level and structure of risk which the Bank is prepared to assume in pursuing its business objectives, and which it can assume without allowing existential threats (over and above the inherent risks). The guiding principle of the risk appetite is to ensure that pbb Group has adequate economic and regulatory capital and liquidity resources in the long term. The quantitative organisation takes the form of risk limits for capital and liquidity management with defined escalation mechanisms as well as quantitative and qualitative early warning indicators. The risks identified as material are included in the risk strategy in addition to the risk inventory. Further limits and framework conditions for the individual business segments are specified and implemented via guidelines, frameworks and work instructions. They are thus firmly anchored in ongoing management and monitoring. In addition, regular portfolio-specific stress tests are carried out with regard to risk concentrations. Adequate consideration of the main risk types in the risk-bearing capacity calculation is ensured as part of the annual update of the risk-bearing capacity concept.

The core function of a bank as a liquidity and risk transformer results in unavoidable threats which, in extreme cases, could jeopardise the continued existence of the institution. Due to its business model, these inherent existential threats for pbb include, for example, the default of Germany, other European countries, the United Kingdom or the United States.

Environmental, social and governance (ESG) risk

To ensure that ESG risks are adequately taken into account in the risk management processes, an identification and assessment process for ESG risk drivers was established as an integral part of the annual risk inventory and further developed in 2023. By identifying and describing the possible impact channels of potential ESG risk factors, it becomes clear to what extent a company's economic and financial activities are affected (financial materiality/inside-out) or how a company's activities impact ESG aspects (environmental and social materiality/inside-out) and in what time frame. Suitable data is used for each risk factor for the portfolio in the materiality assessment. For factors with available ESG risk data, a capital-related quantitative materiality threshold has already been applied. For ESG risk factors without a quantitative risk assessment, there is only an expert assessment, which is carried out by pbb specialists who are familiar with the effects of ESG risk factors, even for risk factors with quantitative results. With regard to the materiality of environmental, social and governance risk factors, the analyses of the risk inventory were dovetailed for the first time with the result of the materiality analysis from the future Corporate Sustainability Reporting Directive (CSRD) reporting obligation, in that partial results[1)] from the CSRD workshops conducted for this purpose were also taken into account. The impact on the individual risk types is analysed and assessed for ESG risk drivers identified as material. The results of the risk inventory with regard to "ESG materiality" are recorded in a separate ESG assessment register. Overall, all climate risks in accordance with the EU taxonomy as well as materiality considerations within the meaning of the CSRD are included in the ESG materiality analysis.

The assessment results for the Real Estate Finance (REF) and Public Sector & Corporate Finance (PS&C) segments were determined and documented separately. All relevant experts are involved in the steps of the assessment process, in particular those with knowledge of lending and property valuation, experts from Human Resources, Legal and Compliance and Risk Management & Control. The results of the ESG materiality process serve as the basis for the development of the management strategy, including the formulation of the ESG risk appetite as part of the risk strategy. This includes the definition of suitable risk indicators for risk monitoring and risk quantification using scenario analyses and stress tests. In addition, the assessment register is used to assign the categorised ESG risk factors to the individual specialist areas and key control processes in accordance with the principle of the three lines of defence (3LoD).

Based on the comprehensive, systematic materiality analysis, specific risk factors relating to physical climate and environmental risk, transitory risk and governance risk were categorised as material. In the area of social risk, none of the risk factors analysed were identified as material. The physical and transitory risk factors recognised as material have an impact on credit risk. Some acute physical risk factors (heavy rainfall, storms and tornadoes) could, with a low probability and to a limited extent, lead to damage to property or disruptions to the Bank's business continuity and are therefore relevant to operational risk alongside the pollution/contamination factor and some governance factors. There is also a potential influence of transitory and governance factors on reputational, legal and liability risks as well as business and strategic risk. No direct sustainability risks are currently recognisable for pbb's market risk as well as liquidity and funding risk.

Stress tests and scenario analyses were carried out to determine the impact of ESG risk factors on credit risk, operational risk and reputational risk. In particular, the effects of relevant climate risks and transitory factors on credit risk were determined as part of the macroeconomic stress test. Scenario analyses were performed for the impact of ESG factors on operational risk and reputational risk, including on the topics of damage to the Bank's own physical assets and infrastructure due to extreme weather events, potential greenwashing accusations and unfavourable public perception of the Bank with regard to sustainability issues. Furthermore, pbb Group has considered ESG risk factors in its monitoring and reporting.

[1)] At the time of preparing the risk inventory and the Risk Strategy 2024, the materiality analysis for the CSRD had not yet been finalised.

From a risk perspective, the focus here is clearly on the opportunities to exert influence along the entire value chain of commercial real estate finance, starting with the procurement of funds, through the initiation of business, the granting of loans, the entire loan servicing, right up to repayment or the realisation of collateral. At pbb Group, the principle of ecological sustainability of the properties to be financed is based on the close interlinking of the sales, credit and risk management divisions as well as the appraisers, and is an integral part of the lending decision process.

The analysis of taxonomy conformity and defined e-criteria in accordance with the pbb Green Scoring model with its three pillars of energy efficiency, "green building" certifications and additional sustainability criteria (e.g. distance to public transport, use of green electricity) is now established as an integral part of all new business. In addition, pbb uses a specially developed decarbonisation tool based on the CRREM tool to analyse risks and opportunities. This focuses in particular on the opportunities for transformation into a sustainable property. At the same time, the systematic and comprehensive follow-up data collection on sustainability aspects in the context of new business and also among customers with existing financing was completed in 2023. As at 31 December 2023, 73.6% of the real estate portfolio was fully rated and evaluated according to ESG criteria. This means that pbb Group has created a basis for visualising the sustainability of its loan portfolio and the associated risks, and has laid the foundation for the long-term management of ESG risks. The first early warning indicators relating to LTV and pbb Green Score were implemented in 2023. The data collected was already gradually integrated into pbb's own IT landscape in 2023. The integration of further ESG-relevant data into the IT systems will be continued in 2024.

pbb Group currently defines two management-relevant key figures focussing on transparency (in the climate dimension): A transparency ratio for the E-score, energy consumption and energy performance certificate (EPC) within the REF portfolio. In addition, the aim is to orientate the portfolio towards transition paths that are compatible with climate targets through active climate management. At the same time, pbb is endeavouring to actively manage the GAR and BTAR indicators relevant to the EU taxonomy. These indicators are also currently being further developed with a view to the precise definition of targets and the management approach.

Liquidity risk management

A central component of liquidity risk management is the daily calculation of the cumulative liquidity position for different scenarios (base, risk and stress scenario). The cumulative liquidity position is the reporting date-related presentation of expected future cash inflows and outflows, on the basis of which the liquidity requirement or liquidity surplus is determined. Control mechanisms such as limits and early warning indicators (triggers) are defined and monitored accordingly based on the methodology of the cumulative liquidity position. Limits or triggers exist for the cumulative liquidity position, depending on the scenario, up to a term of 2 years. In order to fulfil the minimum requirements for the regulatory liquidity coverage ratio (LCR), the Bank has established corresponding limits and early warning indicators. In the 2023 financial year, the regulatory minimum ratio of 100% was significantly exceeded on every reporting date. The average LCR (average of the last twelve month-end values) at the end of 2023 was 255%, while the LCR as at the disclosure date of 31 December 2023 was 212%. A minimum value of 100% must also be maintained for the structural liquidity ratio (net stable funding ratio, NSFR). The NSFR at the end of 2023 is 111%. pbb determines both the LCR and the NSFR as part of its regulatory reporting processes, communicates them in its internal reporting and reports them to the supervisory authorities.

A basic prerequisite for ensuring pbb Group's liquidity position at all times is complete, timely, transparent and methodologically adequate risk measurement. The methods and models used for this purpose correspond to the current, common standards of the banking industry. They are regularly reviewed by Risk Controlling, Internal Audit, our external auditor and the German and European supervisory authorities. Both our business strategy and our risk strategy are made measurable, transparent and controllable by the risk measurement methods used.

Capitalisation and risk-bearing capacity

In order to ensure adequate capitalisation, compliance with the economic risk-bearing capacity and regulatory capital ratios is reviewed as part of an early warning system in both a forecast and an adverse stress scenario. The economic risk-bearing capacity, measured using the internal capital adequacy ratio, is clearly met at 173% as at 31 December 2023. pbb's Common Equity Tier 1 capital ratio (CET1 ratio) is largely based on the capital requirements from the Supervisory Review and Evaluation Process (SREP) of the ECB as the responsible supervisory authority, plus a buffer deemed appropriate by pbb's management to cover potential stress situations. The ECB has increased the Pillar 2 Requirement (P2R) applicable for the 2023 financial year from 2.5% to 3.0% for 2024. As at the disclosure date, pbb Group's Common Equity Tier 1 ratio (CET1 ratio) was 15.7% with risk-weighted assets (RWA) of € 18.5 billion and Common Equity Tier 1 (CET1) capital of € 2.9 billion. This provides a sufficiently comfortable capital buffer to realise the planned business activities. On the other hand, this capitalisation also reflects a high risk-bearing capacity should the difficult conditions in the environment persist over a longer time horizon. Nevertheless, numerous risk factors could have a significant, non-reliably quantifiable impact on the forecast annual result for 2024 in the event of unfavourable developments. These primarily include exceptionally high global economic risks resulting from the changed macroeconomic environment.

Leverage ratio

In addition to the risk-based view of capital requirements and regulatory capital ratios, the leverage ratio is used as a non-risk-sensitive capital requirement. In accordance with Article 92 (1) CRR, institutions must comply with a binding leverage ratio of at least 3% at all times. The pbb Group met this requirement at all times in the 2023 financial year. The leverage ratio amounted to 6.2% as at the disclosure date.

NPL ratio and risk provisioning

The difficult property market development had a significant impact on the risk provision result in the 2023 financial year, which was significantly more negative than in the previous year at € -212 million (2022: € -44 million). The risk provision result for financing in impairment levels 1 and 2 was almost balanced overall, while financing with indicators of impaired creditworthiness (level 3) resulted in risk provision expenses of € 211 million. The additions to stage 3 result from financing that moved to stage 3 as a result of indicators that were observable for the first time, as well as from financing that was already allocated to stage 3 in previous years. The main reason for the additional risk provision was a decline in the expected realisation proceeds derived from the current lower prices for comparable transactions. In terms of number and volume, property financing in the USA and development financing in Germany were primarily affected.

The non-performing loan ratio (NPL ratio), which only takes into account loans and credits, but not debt securities and off-balance sheet risk positions (such as loan commitments) or balances at central banks or other sight deposits, amounted to 3.7% as at the disclosure date. The portfolio of non-performing loans and credits increased by a total of € 708 million to € 1,540 million in the 2023 financial year.

Intragroup transactions and transactions with related parties

No material intra-Group transactions or material transactions with related parties that could have a significant impact on pbb Group's risk profile were entered into in financial year 2023.

General organisation and principles of risk management

This chapter describes the general organisation and the main principles of risk management for pbb Group in accordance with Article 435 (1) CRR. In the further course of the Disclosure Report, these explanations are supplemented by additional information on the management of the risk types credit risk (credit risk, counterparty credit risk), market risk, liquidity and funding risk, operational risk and ESG risk (environmental, social and governance risks).

In accordance with the requirements of section 91 (2) of the AktG and section 25a of the KWG, a Group-wide risk management and risk controlling system has been set up for pbb which, amongst other things, enables uniform risk identification, risk measurement and risk limitation. In accordance with section 2a (2) KWG, pbb utilises the exemption from the requirements of section 25a (1) sentence 3 nos. 1, 2 and 3 letters b and c KWG with regard to the risk controlling function at the level of the individual institution.

Organisation and committees

Management Board and Supervisory Board

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

The principles, methods and processes of pbb's risk management system are specified centrally by Risk Management and Controlling and are applied uniformly throughout pbb Group, subject to any special features at the level of individual companies. All material risks are identified, analysed, assessed, managed, documented, monitored and communicated in a comprehensible and systematic manner.

Key activities in the risk management system for which the Management Board is responsible are

- Defining, updating and communicating business and risk strategies as the basis for business activities and risk appetite
- Definition and further development of organisational structures, in particular for risk management, to ensure the management and monitoring of all material risks
- Adoption of credit authorisation guidelines as a decision-making framework along the credit processes
- Decisions on (portfolio) management measures outside the delegated competences.

The Management Board informs the Supervisory Board about material changes to the business and risk strategies as well as about the risk profile of pbb Group. The Risk Management and Liquidity Strategy Committee (RLA) of the Supervisory Board deals with the management of the overall risk situation, the monitoring, establishment and further development of an efficient risk management system as well as liquidity management and protection, and decides on the necessary approvals for lending decisions. The Management Board informs the committee about all increases and new individual value adjustments (stage 3 value adjustments) above an amount of € 5 million and at regular intervals about larger and higher-risk exposures.

The committees described below have been established at pbb Group level, with the participation of the respective decision-makers.

Risk Committee

The Risk Committee (RC) is made up of the CRO (Chairman), the CEO (Deputy Chairman), the Chief Credit Officer (CCO), the Head of Risk Management & Control (RMC) and a department head from Credit Risk Management (CRM). The committee usually meets monthly and discusses risk development, adopts guidelines, methods for risk measurement, their parameterisation and methods of risk monitoring for all risk types. The RC is responsible for the development of uniform standards for risk management and controlling throughout the Group and also monitors the development of risk-bearing capacity, economic capital, risk cover funds and the credit portfolio as well as compliance with limits. Portfolio developments are discussed in the Risk Committee. In addition to the Risk Committee, other committees discussed below have been established.

Credit Committee

The Credit Committee is chaired by the CRO or the CCO. The committee generally meets at least once a week and makes credit decisions with regard to new business, prolongations and credit-related changes, insofar as these fall within the committee's remit. It also votes on all credit decisions that fall within the remit of the Management Board or require authorisation or approval by the RLA. It is the task of the responsible authorisation holders to ensure that lending decisions are in line with the current business and risk strategy.

Watchlist Committee

The Watchlist Committee is chaired by the CCO and meets monthly. The committee discusses all exposures that have become conspicuous as part of the early warning system and, if necessary, defines individual, risk-limiting measures that are subsequently implemented by the responsible departments. If necessary, the committee decides on the transfer of individual exposures to the CRM REF Workout department, which carries out the necessary steps for restructuring or workout on the basis of an individual exposure strategy, as well as on a transfer back to standard loan management after the corresponding transaction has recovered. It is the task of the responsible processing unit to obtain all credit decisions required to implement the measures in accordance with the credit authority regulations.

Risk Provisioning Committee

If there are indicators of impaired creditworthiness (stage 3 impairment) in accordance with IFRS 9 for an exposure, the result is presented to the Risk Provisioning Committee (RPC) once the amount of the impairment has been determined. This is chaired by the CRO. The RPC makes decisions within the framework of a predefined authorisation system and in accordance with IFRS/HGB regulations.

New Product Process Committee

The New Product Process Committee consists of representatives from the most important infrastructure and control departments, which are determined by the RC. The committee acts on an ad hoc basis and has the task of ensuring that the resulting risks and the impact on processes, controls and infrastructure are systematically analysed and addressed before business activities with new products and in new markets are commenced. Business activities with new products or in new markets are only commenced following approval by the New Product Process Committee.

Stress Test Committee

The Stress Test Committee, chaired by the CRO, is responsible for the methodology, implementation and monitoring of internal stress tests. It is also involved in the development of scenarios for the recovery plan required by law for each institution.

Asset and Liability Committee / Legal and Regulatory Risk Committee / Outsourcing Committee

In addition to the Risk Committee, there is the Asset and Liability Committee (ALCO), chaired by the Management Board member responsible for Treasury, and the Legal and Regulatory Risk Committee (LRRC), chaired by the Head of Compliance. The ALCO is responsible for liquidity management, the management of pbb Group's balance sheet structure, the definition of long-term financing strategies, capital management and the management of regulatory capital ratios as well as market risk management. The LRRC advises on legal and regulatory requirements and can assign these to the specialist divisions for implementation following consultation. The Outsourcing Committee, chaired by the Head of Finance, deals with the implementation of regulatory and legal requirements, the creation of and compliance with the associated internal guidelines and the overarching management and monitoring of outsourced activities.

ESG Committee

There is also an ESG Committee, which deals with ESG issues and ESG risks within pbb Group. The ESG Committee comprises the entire Management Board as well as the heads of Communications, Compliance, Human Resources, Information Technology, Property Analysis & Valuation, Credit Risk Management, Treasury, Risk Management & Control, Loan Markets, Sales Germany, the members of the ESG Programme Management Team and the project managers of the various ESG sub-project strands Environment (E), E(SG) Risks, Governance (G) and Social (S) as well as the sub-project strands ESG Communication and ESG Disclosure. The tasks of the ESG Committee were expanded in the first half of 2023. The ESG Committee is now primarily responsible for the management of regulatory and legal requirements relating to ESG, the development of an ESG business strategy and the monitoring of corresponding implementation measures within pbb Group. It develops ESG targets and the measures required to achieve these targets. The ESG Committee also deals with the development of ESG key performance indicators and the resulting management.

Organisation of risk management

<table>
<tr><td colspan="9">Risk Management and Liquidity Strategy Committee (RLA) of the Supervisory Board</td></tr>
<tr><td colspan="9">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><td rowspan="2">Environmental, Social and Governance (ESG) Committee</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 on compliance.

Chief Risk Officer (CRO)

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

Organisation of the Chief Risk Officer

Chief Risk Officer (CRO)				
Risk Management & Control (RMC)	Credit Risk Management (CRM)	Projects Risk Management	Operations & Digitalisation	Compliance

The organisation of the CRO function comprises a monitoring and back office unit at the level of pbb Group:

- Risk Management & Control, which monitors market, counterparty, operational and liquidity risks as well as risk-bearing capacity and is responsible for standardised risk measurement methods and risk reports across the Group.
- the CRM and Projects Risk Management units, which are responsible for analysing new business and portfolio management. The CRM division also includes the Workout unit, which aims to restructure or settle all critical exposures, and the Credit Processes unit, which is responsible in particular for the organisation of the Credit Committee, the continuous improvement of data quality in CRM and the implementation of regulatory requirements in the credit processes.
- the Operations & Digitalisation division. The Operations division is responsible for the global servicing and management of the loan portfolio (including the technical implementation of loan agreements), the settlement of capital markets transactions, the management and processing of securities and derivatives portfolios, and the handling of national and international payment transactions. The Digitalisation sub-division acts as a centre of competence for pbb as a whole, and drives pbb's digital transformation. Among other things, the strategic focus is on the digital client interface and intelligent process automation for efficiency gains through the use of new technologies and methods, such as agile project management.
- The Compliance division is responsible for ensuring that pbb Group's behaviour complies with the law and regulations by means of methods and procedures as well as auditing and reporting processes. In particular, Compliance is responsible for regulations and controls to prevent money laundering and other criminal offences, for compliance with sanctions and embargoes, as well as for capital market compliance, and is also responsible for general compliance issues. In this way, the compliance function counteracts the risks that can arise from non-compliance with legal regulations and external and internal requirements. In addition, the central coordination for key controls (control attestation process) is located in the Compliance department to strengthen the internal control system. Compliance is represented on various committees and regularly reports to the Audit and Digitalisation Committee of the Supervisory Board in addition to the Management Board.

In addition to the CRO function, the independent Property Analysis & Valuation (PAV) and Group Internal Audit units complement the risk management system. PAV is responsible for the analysis and uniform valuation of collateral properties according to market and mortgage lending value methods, the observation (research) of regional property markets and the monitoring of financed construction projects. PAV also monitors mortgage bond cover with a separate specialised department. Group Internal Audit is responsible for risk-oriented regular and ad hoc audits of processes, controls and systems. This also includes reviewing the risk management system and the internal control system.

Risk strategy and policies

Together with the business strategy, the risk strategy forms the basis for planning and business policy action. It was defined on the basis of the Group-wide risk appetite and reflects pbb's strategic orientation as a specialist for commercial property finance with Pfandbrief-oriented refinancing. The risk strategy also defines the guidelines which, in their entirety, form the risk management system and on which the risk culture is based. The risk strategy applies to the operating segments and legal entities of pbb Group - subject to any special features at the level of individual companies - and is reviewed and updated at least once a year.

In line with the preparation of the business strategy, the risk strategy was adopted by the Management Board as part of the annual strategy preparation process for 2023 and approved by the Supervisory Board. In the context of pbb Group's strategic development, an update of the risk strategy as at the end of June 2023 was approved by the Management Board. In August, it was acknowledged by the RLA and approved by the Supervisory Board. The main focus of this update was the merger of the PIF and VP segments to form the non-strategic NC segment, the intended establishment of a new Real Estate Investment Management business division (bundled under pbb invest) and the termination of the business activities of CAPVERIANT GmbH.

The risk strategy is operationalised via risk policies for the individual business segments as well as guidelines, frameworks or instructions for all material risk types according to the valid risk inventory. The individual documents are regularly reviewed and updated. They contain information on risk measurement, risk monitoring and risk management. They also describe the limiting process and the escalation process in the event of a limit being exceeded.

Risk reporting

The risk reporting system is based on the structure of the business segments. The Management Board receives regular risk reports containing a comprehensive overview and detailed information on the risk situation per risk type as well as other information relevant to management. The supervisory bodies are also informed about risk-relevant topics 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 to address specific and acute risk priorities, for example in relation to critical markets, products or counterparties.

Risk quantification, risk control and risk management

pbb carries out a comprehensive risk inventory at least once a year in order to systematically identify and analyse potential risks which may result from the business model or the external environment of pbb Group. The objective of the risk inventory is to determine the complete risk profile, in which all risks are identified, assessed with regard to their materiality for the capital and liquidity resources and analysed for possible risk concentrations. Where possible, risks are quantified using appropriate risk models or other methods.

Risks that cannot be quantified or can only be partially quantified are monitored and managed using dedicated capital buffers or separate management tools as well as regular detailed reports and clear guidelines, such as the regulations on compliance and corporate governance.

Risk, capital and liquidity management is based on the ICAAP (capital) and ILAAP (liquidity) management groups, each with a normative and an economic perspective. The normative perspective focuses on the ongoing fulfilment of all capital and liquidity-related legal and supervisory requirements. The economic perspective considers all material risks which could jeopardise the economic viability of pbb Group. The focus is on the present value of the risks.

In addition to measuring, limiting and monitoring risks, all control loops also include regular reporting and escalation processes, and are complemented by scenario analyses and stress tests. In order to take the monitoring of ESG risks into account, pbb is working on integrating the various ESG risk factors into the relevant risk types, which also includes monitoring, reporting and quantification. In addition, climate-specific stress tests and scenario analyses are continuously developed, expanded and refined. Within the strategic steering committees, pbb defines its risk appetite and the scope of the risks it is prepared to take. This is used to generate operational management impulses through limit systems, committee decisions and other management decisions.

Corresponding limit and early warning systems are implemented in line with the risk appetite within the individual risk types and across the capital management groups. The strategy underlying each risk type, the risk definition, the risk calculation methods and the reporting are described in detail in the following chapters.

Internal audit

The need for an internal audit (Group Internal Audit) arises from specific statutory regulations, such as Section 25a (1) sentence 2 no. 3 KWG in conjunction with MaRisk (in particular AT 4.4.3 in conjunction with BT2) and Section 91 (2) AktG.

In this sense, auditing is an integral part of the internal monitoring system. The so-called "internal control system" (ICS) comprises all forms of monitoring measures that are directly or indirectly integrated into the work processes to be monitored (= process-dependent monitoring). On the other hand, Internal Audit, as an instrument of the Management Board, monitors operating and business processes, risk management and risk controlling as well as the ICS in a risk-oriented manner (= process-independent monitoring).

The Management Board assigns to Internal Audit the right of initiative and authorises it to communicate directly with any employee in order to investigate any activity or business unit and to gain access to all records, file documents or data of pbb, including management information and the minutes of all advisory and decision-making bodies, whenever this appears relevant for the performance of its tasks. This also includes (physical) access to all premises as well as technical access to the IT systems.

In accordance with the Remuneration Ordinance for Institutions, Internal Audit is independently involved in monitoring the remuneration systems (in accordance with Section 2 (9) in conjunction with Section 3 (3) Remuneration Ordinance for Institutions).

Internal Audit reports directly to the Management Board of pbb. The Chairman of the Supervisory Board / Audit and Digitalisation Committee and all other members of the Audit and Digitalisation Committee may obtain information directly from the Head of Internal Audit, with the involvement of the Management Board. In addition, the Head of Internal Audit regularly reports to the Audit and Digitalisation Committee on audit results/planning.

Based on a risk-oriented audit approach, the audit activities must cover all operating and business procedures, activities and processes. In particular, they are audited and assessed in accordance with MaRisk:

- the internal control system (ICS)
- the risk management and controlling processes
- the reporting and information systems
- Finance and accounting
- compliance with applicable legal and regulatory requirements and other regulations
- compliance with company guidelines, rules and regulations and
- the security of the assets.

This includes the audit of outsourced functions. The tasks of Internal Audit also include special audits commissioned by the Management Board. While maintaining its independence, the Internal Audit department must provide project support for significant projects. Internal Audit must be informed in advance of all significant projects in order to be able to determine the type and scope of project support in good time.

The auditors have a complete and unrestricted right to information. The requested information and documents must be made available to the auditors without delay and they must be granted insight into the activities and processes as well as the IT systems.

In addition, each organisational unit is obliged to inform the internal audit department without being requested to do so if serious deficiencies are identified in its area of responsibility or if notable damage has occurred or if there is an initial suspicion of such damage.

In particular, significant information from a risk point of view must be forwarded immediately - in addition to the management and the respective responsible persons - to the audit management.

Further information on the internal control system can be found in pbb Group's Annual Report 2023, Risk and Opportunity Report, chapter "Organisation and principles of the internal control system").

Risk types

pbb Group distinguishes between the following material risk types for its business activities:

- Credit risk (counterparty credit risk)
- Market risk
- Liquidity and funding risk
- Operational risk
- Business and strategic risk
- Property risk
- Pension risk
- Central counterparty risk
- Environmental, social & governance risk.

Information on the management of the risk types credit risk (credit risk, counterparty credit risk), market risk, liquidity and funding risk, operational risk and ESG risk (environmental, social and governance risks) in accordance with Article 435 (1) CRR can be found later in this Disclosure Report. The risk types business and strategic risk, property risk, pension risk and central counterparty risk are defined as follows:

Business and strategic risk

Business and strategic risk at pbb Group refers to the risk of negative deviations in income and expenses from their planned values which result from strategic decisions, inappropriate planning assumptions or unexpected changes in the external environment and which are not already covered by other risk types such as market, counterparty or operational risk. Details on quantification and the calculation results for the economic capital for business and strategic risks are described in the section "Economic capital and risk-bearing capacity (ICAAP)".

Property risk

Property risk is defined as a potential negative change in the value of the company's own property portfolio due to a deterioration in the property market or economic conditions or a negative change in the specific characteristics of the individual property due to vacancies, changes in potential uses, structural damage, the need for investment, legal and economic conditions and other factors. As at 31 December 2023, there were no properties in the company's own property portfolio, as at the end of the previous year 2022.

Pension risk

Pension risk is defined as the risk of additional expenses due to insufficiently capitalised pension commitments from defined benefit pension plans. It is taken into account as part of the ICAAP. Pension risk is integrated into market risk; details can be found in the section "Economic capital and risk-bearing capacity (ICAAP)".

Central counterparty (CCP) risk

The central counterparty (CCP) risk defines the risk of loss caused by liability claims of the CCP against pbb. This can occur, for example, if a clearing member defaults. The risk is taken into account in the economic perspective by means of a buffer in the risk cover amount and in the normative perspective when determining the risk-weighted assets.

Economic capital and risk-bearing capacity (ICAAP)

This chapter shows the information for pbb Group on the assessment of internal capital adequacy in accordance with Article 438 (a) to (c) CRR.

Internal Capital Adequacy Assessment Process (ICAAP)

In accordance with section 91 (2) of the AktG and section 25 a (1) of the KWG, pbb is obliged to establish appropriate and effective internal procedures in order to ensure risk-bearing capacity on an ongoing basis. The internal capital adequacy assessment process (ICAAP) is subject to supervisory reviews (SREP) and supplements the supervisory procedures of Pillar 1 of the Basel III framework set out in the CRR and CRD.

In accordance with the "ECB Guide to the internal capital adequacy assessment process (ICAAP)" published in November 2018, the supervisory authority expects two complementary perspectives in the ICAAP, a normative and an economic perspective. In accordance with the current ICAAP methodology, the adequacy of capitalisation is assessed from both the normative and the economic perspective. Both perspectives are aimed at the consistency of business and capital planning as well as the long-term viability of pbb Group.

The normative perspective focuses on ensuring that the regulatory and supervisory capital and liquidity requirements are met over several years. A particular focus is placed on the forward-looking fulfilment of the requirements for regulatory capital ratios under expected and adverse conditions. The normative perspective takes into account both the cross-institutional capital ratios required under the CRR and the bank-specific minimum ratios for capital adequacy notified in accordance with the ECB's SREP decision. The metrics Common Equity Tier 1 capital ratio, Tier 1 capital ratio, own funds ratio, leverage ratio and regulations on MREL (Minimum Requirements on Own Funds and Eligible Liabilities) and large exposure limits form the capital-related regulatory and legal requirements.

The economic perspective is an additional, parallel and equal management approach that is continuously monitored and reported on a monthly basis. Its aim is to ensure the economic viability of the institution and thus to safeguard its intrinsic value. All material economic risks are analysed from a present value perspective, quantified as far as possible using models and aggregated to form economic capital. Economic capital is defined as the capital required to cover financial risks at a confidence level of 99.9% and an observation period of one year. It is calculated for all relevant risk types and aggregated to form total economic capital after diversification effects. The capital available to cover the overall risk is determined and compared with the economic capital.

The capital and earnings risks identified as material in the risk inventory - i.e. market risk, credit risk, business and strategic risk, operational risk and property risk - are included in the ICAAP and the economic capital of these risk types is quantified using models or other methods. Within these risk types, there are further material sub-risks at a granular level that were taken into account as other risks in the ICAAP during the disclosure period, whereby the prolongation risk, the fulfilment risk of derivatives, the market risk from TLTRO III and the realisation risk of defaulted customers are summarised. Since the beginning of 2023, model risk has no longer been reported under other risks, but is recognised in the respective risk types. Refinancing risk is included in business and strategic risk.

In addition to analysing risk-bearing capacity, the ICAAP also includes additional management elements, such as a system of limits and early warning thresholds for risk and capital ratios and a comprehensive monthly monitoring and reporting process. In addition, selected key figures are forecast within base and stress scenarios over a medium-term period of up to three years and are also subject to limits and early warning thresholds. Compliance with the limits, together with a defined escalation process, helps to ensure adequate capitalisation on an ongoing basis.

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

The methods used to calculate the economic capital for the individual risk types and the key figures as at the reporting date are explained in more detail in the following sections "Quantification of the economic capital of individual risk types" and "Result of the risk-bearing capacity analysis".

Quantification of the economic capital of individual risk types

For the internal assessment of the capital adequacy process in accordance with the economic perspective, the economic capital of the quantifiable risks is determined using models or scenario analyses and aggregated to the overall bank risk using a mathematical-statistical approach, taking into account specific correlations between market and credit risks. The risks are calculated for a period of one year and at a confidence level of 99.9%.

The economic capital calculation method for the individual material risk types for 2023 is explained below.

Economic capital for credit risk

A credit portfolio model based on the asset value model approach is used to calculate the credit risk at portfolio level. The basic idea is that a statistical distribution of losses can be derived from the repeated simulation of correlated rating migrations of borrowers and the associated revaluation of the portfolio. The economic capital can then be derived as an unexpected loss from the loss distribution determined in this way. This quantifies the maximum unexpected loss, calculated at a specified confidence level, that can result from rating migrations (including defaults) in the lending business within a year. In addition to the loss distribution of the credit portfolio, the risk-adequate allocation of the credit risk capital measured in this way to the individual borrower units in accordance with the expected shortfall principle is a key result. This ensures a causation-based allocation to the borrowers and thus provides a key building block for the risk-oriented management of the loan portfolio. The correlations between borrowers, borrower groups and regions were updated during the period under review.

The recognised credit risk includes the default and migration risk, the transfer and conversion risk, the concentration risk and the model risk. The other elements of credit risk, such as the realisation risk for defaulted customers, the settlement risk and the prolongation risk, are not reported directly in the credit risk, but are updated regularly and represent a component of the overall risk as other risks.

Economic capital for market risk (including pension risk)

The calculation of economic capital for market risk is used to recognise potential financial losses from price changes in all positions. The potential unsystematic losses are derived from an analysis of historical time series of certain influencing factors (risk factors) such as interest rates, exchange rates and credit spreads over a period dating back to 1 July 2007. The historical observation period of the risk factors on which the calculation of the market risk is based thus covers more than ten years, so that unfavourable economic phases for pbb are also taken into account and captured by the model. Finally, the annual loss distribution of the portfolio market value is determined by means of a simulation procedure and using the sensitivities of the financial instruments to risk factors, from which the economic capital can be determined at the specified confidence level.

Economic capital for operational risk

Operational risk is quantified as part of the ICAAP using the loss distribution approach (LDA). The distributions for loss amount and loss frequency are determined separately using internal loss data from the loss database. External data and scenario data are also included in the modelling. The entire loss distribution is generated using a Monte Carlo simulation, taking into account diversification effects between the various sub-risk types and modelling categories. The economic capital for operational risk includes a buffer for possible modelling uncertainties. Furthermore, it is ensured that the calculated value for the economic capital does not fall below a certain lower limit. This lower limit corresponds to the regulatory capital calculated in accordance with the standardised approach of the CRR. Sub-risk types of operational risk that cannot be quantified or can only be partially quantified, such as reputational risk, are covered by a capital buffer.

Economic capital for business and strategic risk

Business and strategic risk is quantified in the ICAAP by means of scenario analyses of all relevant items of the income statement. pbb Group does not take any planned profits into account when deriving the aggregate risk cover. This means that at least a buffer in the amount of the entire positive planned result is reserved for business and strategic risk, as this type of risk is defined as a potential negative deviation from the planned income and expenses. If a higher amount than the planned profits is calculated as part of the quantification of the business and strategic risk, the amount of the business and strategic risk which exceeds the planned annual profit of pbb Group is recognised as a risk.

Liquidity risk in the ICAAP

It is not possible to capitalise liquidity risks in the narrower sense. Liquidity risks in the broader sense, i.e. an increase in refinancing costs for an unexpected potential financing requirement, are recognised in the economic capital for business and strategic risk.

Result of the risk-bearing capacity analysis

Normative perspective

Please refer to the "Own funds and assets" section for a detailed presentation of the CET1 ratio, Tier 1 ratio, own funds ratio, MREL and leverage ratio measured as at the reporting date. The regulatory capital ratio requirements were met at all times in the reporting year. Furthermore, the forward-looking medium-term analysis of the key capital-related ratios required by the supervisory authorities did not show any critical values in accordance with the limit system, neither in the base scenario nor in the stress scenarios.

Economic perspective

In the economic perspective, the overall risk after diversification effects remained constant in the disclosure period. The decline in economic capital from credit risk, business and strategic risk and operational risk was more than offset by an increase in market risk and other risks. Market risk increased due to higher interest rate and credit spread risks, primarily driven by model adjustments. The increase in other risks is primarily due to higher unexpected losses from defaulted customers and the increased prolongation risk. A higher liquidity position led to a decrease in economic capital from business and strategic risk. The reduction in economic capital in credit risk was driven by the decline in Non-Core, primarily due to portfolio effects as well as rating and LGD improvements, and was only partially offset by the increase in REF due to new business and prolongations. The economic capital for operational risk is calculated at least once a year and has decreased. In addition to updating the data used in the model and taking the new business area into account, further methodological improvements were implemented, climate and environmental risk were integrated and data coverage for cyber risk was improved. The property portfolio continued to show no properties during the disclosure period.

This contrasts with the aggregate risk cover, which fell during the disclosure period, primarily due to the dividend payment made in May 2023. Compared to the end of 2022, the surplus cover has decreased slightly and the internal capital adequacy ratio, defined as the ratio of aggregate risk cover to diversified economic capital, has fallen. Overall, the risk-bearing capacity was also demonstrated for the economic perspective as at the reporting date.

ICAAP - Risk-bearing capacity Economic perspective (EU OVC)

		a	b	c
			Economic perspective	
All figures in € million, unless otherwise stated		31.12.2023	31.12.2022	Change
1	Credit risk	923	965	-42
2	Market risk	541	457	84
3	Operational risk	86	94	-8
4	Business and strategic risk	27	67	-40
5	Property risk	-	-	-
6	Other risks	73	69	4
7	**Total before diversification effects**	**1,650**	**1,652**	**-2**
8	**Total after diversification effects**	**1,559**	**1,563**	**-4**
9	Available financial resources before net hidden losses	2,794	2,854	-60
10	Net hidden losses	-89	-116	27
11	**Available financial resources**	**2,705**	**2,738**	**-33**
12	Excess capital	1,145	1,175	-30
13	Capital adequacy ratio in %	173	175	-2

Should the credit spreads or credit ratings of European public-sector borrowers deteriorate due to economic or political developments, a corresponding increase in credit risks and a reduction in the risk cover funds due to an increase in hidden liabilities (net) and reduced equity is to be expected, regardless of any countermeasures. A further deterioration in the property markets would lead to a deterioration in the rating of the corresponding debtors and thus to a higher credit risk. In addition, a deterioration in funding spreads could have a negative impact on market risk.

Opportunities

A rapid economic recovery would lead to declines in credit spreads and generally to rating improvements, further strengthen the risk cover funds and thus increase the excess cover in the ICAAP.

Stress tests

Stress tests play a key role both from a regulatory perspective and as part of the bank's internal management. All activities, developments and decisions relating to stress tests are coordinated and bundled in the Risk Committee and the subordinate Stress Test Committee.

As part of an integrated approach, the impact of macroeconomic stress scenarios on the key metrics of the normative and economic perspective over a multi-year time horizon was determined during the disclosure period. Stress scenarios were developed, particularly with regard to the war in Ukraine and the development of inflation as well as the resulting macroeconomic developments, and the impact of these events on the Bank was analysed. Due to the very dynamic development, these scenarios are subject to a high degree of uncertainty.

Furthermore, stress tests are used in relation to the economic capital and the risk cover funds in order to develop a deeper understanding of the sensitivity of the risk-bearing capacity calculation to adverse movements in economic factors. In addition, so-called inverse stress tests are also carried out on a regular basis, the results of which describe certain parameter constellations that would jeopardise the risk-bearing capacity.

Credit risk

Management of credit risk (including counterparty credit risk)

This chapter describes the risk management objectives and the risk management policy in accordance with Article 435 (1) CRR for the credit risk (credit risk, counterparty credit risk) of pbb Group.

Definition

Credit risk generally refers to the risk of an unexpected default or decline in the market value of a receivable (loan or bond) or a derivative (alternatively an entire portfolio of receivables or derivatives) resulting from a deterioration in the collateral value or a deterioration in the creditworthiness of a country or counterparty.

The credit risk comprises the default risk, the migration risk, the realisation risk for defaulted customers, the transfer and conversion risk, the tenant risk, the settlement risk, the prolongation risk as well as the concentration risk, which are defined as follows in the risk strategy of pbb Group:

Default risk

Default risk refers to the risk of defaults on receivables. The definition includes defaults on loans and other credit instruments (credit risk) as well as defaults on bonds or other securities (issuer risk) or defaults on receivables from derivatives (counterparty/replacement risk) and money market transactions (repayment risk). The possible default of state or regional governments is also included as a special case (sovereign default risk).

Migration risk

Migration risk is the risk of a decline in the value of a receivable due to rating migrations. The risk includes both the risk of rating migrations of traditional borrowers and the migration risk of bonds and other securities or receivables from derivatives and money market transactions. The effects of rating migrations of state or regional governments are also included as a special case.

Realisation risk

The realisation risk for defaulted customers is the risk that the risk provision recognised changes over the observation period or that different realisations occur in the event of realisation.

Transfer risk

Transfer risk is the risk that a government or central bank restricts the use of the currency to its own country. This includes conversion risk, i.e. the risk that a government or central bank declares its own currency to be non-convertible. Together with the default risk of states, transfer and conversion risk form the country risk.

Tenant risk

On the one hand, tenant risk refers to the risk that the debt servicing capacity of the respective borrower may be negatively affected by a possible loss of rental income from properties. It also includes the secondary concentration risk (tenant cluster risk), which arises from the fact that one and the same tenant is involved in several properties financed by pbb.

Fulfilment risk

Settlement risk is the risk that pbb makes a payment or delivers a sold asset to a counterparty, but does not receive a payment request or the purchased asset.

Prolongation risk

Prolongation risk refers to the risk that the holding period of an asset relevant to credit risk is extended by a maximum of one year.

Concentration risk

Concentration risk refers to the risk of clustering in relation to a risk factor or counterparty or to a highly correlated group of risk factors or counterparties.

Risk strategy and principles

pbb Group has divided its entire credit portfolio into the segments Real Estate Finance (REF), Non-Core (NC) and Consolidation & Adjustments (C&A). The strategic business is attributable to Commercial Real Estate Finance (REF). The risk strategy also reflects this structure.

With regard to the business focus in connection with the strategic portfolios and the statements on strategy in the run-off portfolio, please refer to the information in the "Organisational and legal structure" section.

Risk reporting

pbb's reporting system for counterparty credit risk contains the following key components:

Group Risk Report

In addition to the volume development, the pbb Group Risk Report includes relevant credit risk management indicators such as the development of the expected loss and the unexpected loss via the value at risk. The report shows the credit risk at pbb Group level in the context of the overall bank risk and the risk-bearing capacity, reports limit utilisations and limit breaches, and shows risk concentrations. Key figures such as the development in exposure at default (EAD), expected loss (EL), credit value at risk (credit VaR) and problem loans are integrated in this report and are discussed by the Management Board. The report is also brought to the attention of the RLA of the Supervisory Board and regularly discussed by it at its meetings.

CRM REF Portfolio Reporting

The CRM REF portfolio reporting shows the breakdown of the REF portfolio (including various parameters such as the expected loss in basis points) by country and asset class and reports on critical facilities, forbearance, tenant risks and property submarkets. This quarterly reporting is made available to the CCO, the CRO, the Management Board and the RLA of the Supervisory Board.

CRM Public Sector & Corporates Reporting

CRM Public Sector & Corporates Reporting reports on the Non-Core and C&A segments. The breakdown of the portfolio is presented according to various criteria such as countries, residual terms, type of business partner or product classes. TOP Exposures, Critical Facilities, Forbearance and Financial Institutions are also reported on. The reporting is prepared every six months and made available to the CCO, the CRO, the Management Board and the RLA of the Supervisory Board.

Decisions on new business

Key figures, content and analyses are presented and discussed at individual case level in the Credit Committee for decisions on new business or credit-related changes to existing financing, such as maturity extensions.

Existing business

In day-to-day business, further regular reports support operational management in managing and recognising risks at sub-portfolio level in good time.

Conspicuous developments

Conspicuous developments that could lead to a significant deterioration in the risk situation of an individual exposure are reported on an ad hoc basis directly to a wider group, including the CRO, via so-called "credit issue notes".

Risk quantification via economic capital and risk-weighted assets in accordance with CRR

Credit portfolio model

pbb Group uses a credit portfolio model to calculate the economic capital for counterparty credit risk. This model and the quantification of the economic credit risk are described in the chapter "Economic Capital and Risk-bearing Capacity (ICAAP)".

Stress tests

The stress tests for economic capital in credit risk are discussed in the section "Economic capital and risk-bearing capacity (ICAAP)".

In addition to the economic capital stress tests, there are also RWA reverse stress tests that analyse how much a certain risk parameter (such as rating, loss given default (LGD), currency) can change before a minimum capital ratio (Common Equity Tier 1 capital ratio (CET1), Tier 1 capital ratio (Tier 1) or own funds ratio) is no longer met. The minimum ratios are derived from the bank-specific SREP ratios. Tolerance change levels were defined for all tested risk parameters, which must not be breached in order for pbb Group to pass the tests.

Risk quantification in accordance with CRR

The Basel III framework agreement of the Basel Committee was implemented in the European context by the CRR. pbb uses the so-called Advanced IRBA as well as the standardised approach (CRSA).

Risk control, management and monitoring

Risk management

At portfolio level, the desired portfolio structure is defined by means of structural components in the risk strategy. The limits are also based on the available risk cover funds and include, for example

- Limitation of country risks
- Definition of strategic risk parameters (e.g. regions, financing term).

The following reports and measures are key elements for monitoring compliance with the defined limits and the targeted risk and return parameters at portfolio and individual transaction level:

- Analysing portfolio developments in the Risk Committee
- Determination of the credit VaR at portfolio level using a credit portfolio model and limitation partly at segment level; analysis of concentration risks and various stress tests
- Centralised, Group-wide monitoring of risk concentrations through special, regular and event-driven evaluations, for example of a regional or product-specific nature
- Continuous analysis of the portfolio and the relevant markets by the local credit risk management units
- Regular valuation of loan collateral
- Special reports on potentially impaired credit exposures (e.g. credit issue notes)
- Determination of a risk-adjusted margin based on the economic return after tax.

Depending on the counterparty group, EL class and exposure level at Group level, the credit authorisation regulations define the authorisation level for credit decisions in both new and existing business. The exercise of credit competences is assigned to individual employees based on their individual experience and qualifications.

Risk management and monitoring

At individual transaction level, the guidelines on credit processes determine the necessary risk assessment steps for new business and significant changes such as prolongations or loan increases as well as for the transfer to intensive or problem loan management.

The core processes of credit risk management and monitoring and the areas involved are described below.

The CRM units carry out the initial and annually recurring risk analyses for new and existing business. PD (probability of default/probability of default) and LGD rating tools, which are developed, validated and calibrated annually by the RMC unit, are used to assess and prepare the credit decision in new and prolongation business. The PAV division provides support in analysing and evaluating collateral.

The Legal department - together with external lawyers/law firms if necessary - is responsible for drafting contracts and collateral.

CRM continuously monitors defined early warning indicators. In the event of significant anomalies, an extraordinary review of the credit risk (including collateral value review) is carried out and appropriate alternative courses of action are presented. The cases are also presented to the Watchlist Committee. This committee decides whether they are to be included in a monthly or quarterly monitoring cycle or remain in the annual monitoring cycle.

If there are indicators of impaired creditworthiness, the amount of the stage 3 valuation allowances is determined in accordance with IFRS or specific valuation allowances in accordance with HGB. The results are discussed in the Risk Provisioning Committee and a decision is made on the recognition or reversal of stage 3 valuation allowances/specific valuation allowances if necessary.

For potential problem loans and stage 3 impaired (IFRS)/individually impaired (HGB) exposures, probability-weighted scenario analyses on the potential development of the borrower, the collateral or the relevant market are carried out as part of the calculation of risk provisions. These analyses are reviewed regularly or on an ad hoc basis. Corresponding decisions are made in accordance with pbb's current authorisation regulations.

Both critical exposures (watch list) and cases of restructuring and settlement (problem loans) are reported on a condensed basis monthly in the Group Risk Report and in the Risk Committee as well as in special analyses to the Management Board and Supervisory Board on request.

As required by MaRisk, the level 3 risk provisioning is backtested annually. The results of the analyses are submitted to the RPC for information at the beginning of each new financial year.

Risk protection and risk minimisation

Real Estate Finance

In the REF segment, financing is generally secured by mortgages. In the case of new financing, the loan-to-value ratios, property (including micro and macro location, letting situation, building condition) and market conditions are discussed as part of the decision-making process and taken into account when assessing individual loans. In the case of existing loans, this monitoring takes place regularly, at least once a year.

In addition to mortgages, financing collateral in the REF segment generally also includes assignments of rent and the assignment of insurance benefits and is flanked by extensive information and reporting obligations on the part of borrowers. In addition to mortgages, only a few other selected types of collateral are taken into account as valuable in the credit assessment or LGD calculation, in particular cash collateral, bank guarantees and guarantees from public institutions under certain circumstances. In the case of collateral in a foreign currency, i.e. in a currency other than the loan currency, a corresponding collateral buffer is included in order to take account of any exchange rate risks.

The properties in the REF segment are valued according to strict quality criteria. The values of the real estate collateral are determined when new loans are granted and reviewed annually. pbb maintains an independent PAV division with property analysts: all employees in PAV who are involved in property analysis are certified to ISO 17024 in accordance with the HypZert standard, and most have additional qualifications (e.g. RICS membership). This area is always involved in the initial valuation when new loans are granted and regular revaluations, as well as in the monitoring of values carried out at least once a year on the basis of an automatic monitoring solution in Credit Workplace.

In the case of development financings, the planning status, budget, contract awards, construction schedule, sales/letting and construction status are monitored on a regular basis. In the case of complex developments, monitoring is generally carried out by external project monitors on behalf of pbb on a monthly to quarterly basis. The external project monitors are coordinated and monitored by PAV. For less complex developments, construction progress is monitored at least every three months by experienced and specialised internal property analysts. Costs are tracked using CRM, providing an up-to-date overview of the cost situation and a forecast of the cost development of the project. This is compared with the results of internal (or, if available, external) monitoring. As a result, any deviations from the project plan and thus project risks can be recognised at an early stage during the course of construction.

Public investment financing

In public investment financing, guarantees often serve as security (e.g. contractual guarantees/guarantees from public bodies, export credit guarantees). In addition, there are often legal framework conditions, such as the so-called "Anstaltslast" in Germany or other direct and indirect safeguards that allow recourse to a public body in the case of borrowers organised under public law. In some cases, the guarantees or legal framework conditions in the Non-Core segment are flanked by additional financing collateral and information and reporting obligations on the part of the borrower. However, this additional financing collateral is generally not recognised as valuable in the credit assessment or LGD calculation.

Treasury

In the Treasury division, cash deposits and securities are mainly provided or accepted as collateral when trading with other banks. Collateral is provided on the basis of standard agreements, which may be amended in individual cases or subject to individual review by the legal department.

Opportunities

The risk measures for credit risk are parameterised using statistical methods based on numerous historical observations. The risk measures also depend on assumptions about future developments in macroeconomic conditions and developments on the credit markets. Such economic conditions may develop more favourably than assumed and therefore the potential losses from credit risk may theoretically be lower than quantified by the risk measures. Such possible positive developments then represent opportunities for pbb Group which can be utilised to reduce risk.

Opportunities exist specifically if fewer loans experience defaults in the future than is assumed in the risk quantification. Opportunities may also arise in the future from a lower than assumed number of migrations to lower rating classes.

Opportunities also exist if the loss ratios of non-performing loans are lower in the future than assumed in the risk quantification process. Lower loss ratios can be triggered by various positive developments. On the one hand, it is possible that higher recovery rates will be achieved from the realisation of collateral than assumed in the risk quantification. Secondly, it is possible that a larger proportion of non-performing loans will recover without loss than was the case in the past.

In addition to positive developments in default rates or loss ratios, opportunities also exist in the context of credit risk, theoretically and regardless of other corporate objectives, if exposure values in the portfolio should decline. This can happen, for example, if borrowers redeem or repay their loans more quickly than contractually expected or in accordance with historical experience. Declining exposure values can arise in the derivatives portfolio if changes in certain market parameters such as interest rates or exchange rates lead to a fall in the market values of those positions that are linked to a replacement risk.

Credit risk

This chapter shows the information in accordance with Article 442 CRR on credit risk, in particular on loans and advances, securities/debt securities and off-balance sheet exposures, their credit quality and credit risk adjustments. This includes both exposures for which pbb Group calculates the risk-weighted exposure amounts using the advanced IRB approach (IRBA) based on internal rating procedures and the standardised approach (CRSA).

This excludes counterparty credit risk positions (derivatives and securities financing transactions) and securitisations, which are presented separately in the "Counterparty credit risk" and "Securitisations" sections below.

Loan portfolio

The following tables EU CR1, EU CR1-A and EU CR2 in accordance with Article 442 letters c, f and g CRR show the information on the credit risk positions serviced in accordance with the contract and non-performing/defaulted credit risk positions, on the value adjustments and provisions recognised in the lending business and on the collateral and financial guarantees received, broken down by type of financial asset and by counterparty.

On-balance sheet and off-balance sheet credit risk positions

The gross carrying amounts of on-balance sheet and off-balance sheet credit risk positions as at 31 December 2023, including balances with central banks and sight deposits (EU CR1, line 005), totalled € 52,802 million (30 June 2023: € 51,475 million). Of this total of around € 52.8 billion, € 41,431 million is attributable to loans and credits and € 5,494 million to bonds, while € 2,337 million is attributable to off-balance sheet risk positions such as loan commitments and financial guarantees.

Compared to year-end 2022, the on- and off-balance sheet risk positions declined (€ -2,680 million compared to 31 December 2022, € +1,327 million compared to 30 June 2023). Further information on the development of assets can be found in pbb Group's 2023 Annual Report, including in the Note "Net assets" (page 28).

Non-performing risk positions

The portfolio (based on gross carrying amounts) of non-performing loans and advances amounted to € 1,540 million as at the disclosure date (31 December 2022: € 833 million), which corresponds to an increase of € 708 million in the 2023 financial year. In Real Estate Finance (REF), loan exposures totalling € 950 million were transferred to the Credit Risk Management (CRM) unit responsible for restructuring and settlement (EU CR2, line 020). The share of property financing in the USA (investment financing/office property) amounted to around 48%. By contrast, financing that was transferred back to normal management and loan repayments had the opposite effect (EU CR2, line 030).

The stage 2/3 value adjustments recognised on the non-performing loans and credits of € 1,540 million amount to € 419 million, while the collateral and financial guarantees received for this amount to € 1,100 million.

NPL ratio

The NPE ratio for non-performing exposures based on gross carrying amounts was 3.4% as at the disclosure date (31 December 2022: 1.6%) and the NPL ratio (non-performing loan), which only takes into account receivables (loans and advances) but not debt securities and off-balance sheet exposures, was 3.7% (31 December 2022: 1.9%). The ratios are calculated in accordance with Article 8 No. 4 of the Pillar 3 framework, excluding loans and advances held for sale, balances with central banks and other sight deposits.

EU CR1: Contractually serviced and non-performing exposures and associated provisions

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount/nominal amount [1]						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write-off	Collateral and financial guarantees received [2]	
		Performing exposures			Non-performing exposures			Performing exposures - accumulated impairment and provisions			Non-performing exposures - accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non-performing exposures
All figures in € million			thereof: stage 1	thereof: stage 2		thereof: stage 2	thereof: stage 3		thereof: stage 1	thereof: stage 2		thereof: stage 2	thereof: stage 3			
005	Cash balances at central banks and other demand deposits	3,540	3,540	-	-	-	-	-	-	-	-	-	-	-	-	-
010	**Loans and advances**	**39,890**	**32,923**	**6,643**	**1,540**	**54**	**1,486**	**-163**	**-38**	**-125**	**-419**	**-5**	**-414**	**0**	**30,215**	**1,100**
020	Central banks [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
030	General governments	7,362	7,225	-	-	-	-	-	-	-	-	-	-	-	61	-
040	Credit institutions	1,695	1,695	-	-	-	-	-	-	-	-	-	-	-	548	-
050	Other financial corporations	1,211	1,174	37	-	-	-	-1	-1	-	-	-	-	-	1,182	-
060	Non-financial corporations	29,619	22,826	6,606	1,540	54	1,486	-162	-37	-125	-419	-5	-414	-	28,420	1,099
070	Whereof: SMEs	9,558	7,639	1,810	216	-	216	-45	-13	-31	-19	-	-19	-	9,377	197
080	Households	4	4	-	1	-	1	-	-	-	-	-	-	-	4	1
090	**Debt securities**	**5,494**	**5,369**	**0**	**0**	**0**	**0**	**-1**	**-1**	**0**	**0**	**0**	**0**	**0**	**1,082**	**0**
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	4,110	4,027	-	-	-	-	-1	-1	-	-	-	-	-	424	-
120	Credit institutions	1,355	1,316	-	-	-	-	-	-	-	-	-	-	-	659	-
130	Other financial corporations	29	26	-	-	-	-	-	-	-	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	**Off-balance-sheet exposures**	**2,214**	**1,896**	**268**	**124**	**51**	**72**	**-4**	**-2**	**-2**	**-2**	**-2**	**0**	**---**	**1,975**	**116**
160	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	---	-	-
170	General governments	129	80	-	-	-	-	-	-	-	-	-	-	---	-	-
180	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-	---	-	-
190	Other financial corporations	8	8	-	-	-	-	-	-	-	-	-	-	---	8	-
200	Non-financial corporations	2,077	1,809	268	124	51	72	-4	-2	-2	-2	-2	-	---	1,967	116
210	Households	-	-	-	-	-	-	-	-	-	-	-	-	---	-	-
220	**Total [4]**	**51,138**	**43,728**	**6,911**	**1,664**	**105**	**1,559**	**-168**	**-41**	**-127**	**-421**	**-6**	**-414**	**0**	**33,272**	**1,216**

[1] Gross carrying amount (nominal value for off-balance sheet items) before deduction of value adjustments on financial assets and provisions in the lending business, but after amortisation, before application of credit risk mitigation techniques and before credit conversion factors (CCF).
[2] The value of the collateral and guarantees recognised is limited to the carrying amount (nominal value for off-balance sheet items) of the collateralised/guaranteed risk positions.
[3] The categorisation of a counterparty according to the FINREP sectors is based on the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or, in the case of risk positions entered into jointly by several debtors, on the more significant or more decisive debtor.
[4] Including "Balances with central banks and sight deposits" recognised in line 005.

EU CR1-A: Residual maturity of risk positions

		a	b	c	d	e	f
		Net exposure value [1]					
All figures in € million		**On demand [2]**	**<= 1 year**	**> 1 year <= 5 years**	**> 5 years**	**No stated maturity [3]**	**Total**
010	Loans and advances [4]	813	9,277	20,055	10,704	-	40,849
020	Debt securities	-	821	3,017	1,652	3	5,493
030	**Total**	**813**	**10,098**	**23,072**	**12,356**	**3**	**46,342**

[1] Net value of the risk position: gross carrying amount after deduction of value adjustments on financial assets and after amortisation, but before application of credit risk mitigation techniques. Off-balance sheet items are not taken into account in EU CR1-A.
[2] The counterparty has the choice of when the risk position is repaid (such as short-term balance receivables or similar).
[3] The risk position has no fixed residual term for reasons other than the fact that the counterparty can choose the repayment date.
[4] In accordance with the Pillar 3 framework, Annex XVI, loans and credits held for sale, balances with central banks and sight deposits are excluded.

EU CR2: Change in the portfolio of non-performing loans and advances

		a
All figures in € million		**Gross carrying amount [1]**
010	**Initial stock of non-performing loans and advances [2]**	**833**
020	Inflows to non-performing portfolios [3]	950
030	Outflows from non-performing portfolios [4]	-251
040	Outflows due to write-offs	-
050	Outflow due to other situations [5]	9
060	**Final stock of non-performing loans and advances [6]**	**1,540**

[1] Gross carrying amount (nominal value for off-balance sheet items) of defaulted on- and off-balance sheet risk positions before deduction of value adjustments on financial assets and provisions in the lending business, but after write-downs, before application of credit risk mitigation techniques and before credit conversion factors (CCF).
[2] Portfolio of defaulted loans and credits at the end of the last financial year.
[3] Loans and credits that defaulted during the disclosure period.
[4] Loans and credits that have "non-defaulted" status again as at the disclosure date, i.e. are no longer classified as defaulted/non-performing.
[5] Equalisation item from transfers to restructuring management in the disclosure period less liquidations/restructurings and repayments/redemptions.
[6] Portfolio of non-performing loans and credits as at the disclosure date.

Credit quality

The following tables EU CQ1, EU CQ3, EU CQ4 and EU CQ5 in accordance with Article 442 letters c, d and e CRR show information on the credit quality of on- and off-balance sheet credit risk exposures. Among other things, they provide information on forborne (restructured) exposures, non-performing and defaulted exposures and the associated credit risk adjustments. In addition, the tables contain information on collateral received and financial guarantees, and show breakdowns by counterparty, geographical area (countries) and economic sector (NACE code).

As of the disclosure date, pbb Group still has an NPL ratio (gross carrying amount of non-performing loans and advances divided by the gross carrying amount of non-performing and non-performing loans and advances) of less than 5 %, which is why a disclosure of tables EU CR2a, EU CQ2, EU CQ6 and EU CQ8 in accordance with Article 442 (c) CRR is not relevant under the Pillar 3 framework. The pbb Group regularly reviews whether further disclosure requirements have to be fulfilled as a result of exceeding the threshold of 5% for the NPL ratio.

Similarly, disclosure of table EU CQ7 "Collateral obtained through repossession and enforcement proceedings" in accordance with Article 442 (c) CRR is currently not relevant for pbb Group. EU CQ7 provides an overview of the bail-in acquisitions made by the institution, which originate from non-performing exposures and were obtained by means of repossession. As of the disclosure date 31 December 2023, pbb Group had no bail-in acquisitions or other collateral taken possession of as of the end of the previous year 2022.

Defaulted and non-defaulted risk positions

The gross carrying amounts of on-balance sheet (loans and credits, bonds, balances with central banks and sight deposits) and off-balance sheet credit risk positions (such as irrevocable loan commitments) totalled € 52,802 million as at the disclosure date. The risk positions serviced in accordance with the contract totalled € 51,138 million or around 97%.

The defaulted loans and credits amount to € 1,486 million. A stage 3 valuation allowance of € 414 million has already been recognised on these defaulted loans and credits, while the collateral and financial guarantees received for this amount to € 1,100 million.

A risk position in the IRB approach and in the standardised approach is considered to be "defaulted" if there is a borrower default in accordance with Article 178 CRR or if another contractual or regulatory trigger applies. In this context, pbb Group assumes a default if, for example, a borrower is more than 90 days overdue with material arrears/overdrafts or if it is unlikely that the borrower will meet its payment obligations in full. The risk positions of a borrower that fulfil one or more default criteria are assigned a PD class with a probability of default (PD) of 100%.

Under IFRS 9, the same definition of default is used as for regulatory purposes.

Non-defaulted exposures are exposures that are considered non-defaulted in accordance with Article 178 CRR, i.e. for which none of the default events specified therein have occurred.

Non-performing risk position

All exposures which are considered to be in default in accordance with Article 178 CRR are also considered by pbb Group to be "non-performing". In this respect, the above-mentioned defaulted exposures in the amount of € 1,486 million are also considered "non-performing" exposures.

A risk position is considered "non-performing" if one of the following criteria is met: it is a material risk position that is more than 90 days overdue, or it is a risk position where it is considered unlikely that the debtor will settle its liabilities in full without realising collateral, regardless of whether payments are already overdue and regardless of the number of days of any payment arrears.

This categorisation as "non-performing" is made regardless of whether the exposure is classified as "defaulted" within the meaning of Article 178 CRR for supervisory purposes or as impaired within the meaning of the applicable IFRS accounting regulations for accounting purposes.

Impaired risk positions

A risk position is deemed to be "impaired" if a stage 3 allowance has been recognised in accordance with the accounting standards applied by pbb Group, the International Financial Reporting Standards (IFRS). As of the disclosure date, stage 3 allowances amounted to € 414 million (31 December 2022: € 211 million), the gross carrying amount of impaired risk positions (loans and advances) amounted to € 1,486 million.

All risk positions for which an impairment (stage 3 impairment) has been recognised in accordance with IFRS accounting standards are also considered by pbb Group to be "non-performing".

The rules and methods for impairment in accordance with IFRS 9 are described in the section "Credit risk adjustments".

Overdue risk positions

Receivables in arrears are categorised as "overdue" for both accounting and regulatory purposes if the debtor has not met its contractually agreed interest or redemption payments on time.

The credit risk exposures (loans and credits) that were partially or fully past due as at the disclosure date totalled € 1,609 million (31 December 2022: € 833 million, gross carrying amount), of which the risk exposures that were more than 90 days past due (and non-performing) amounted to € 734 million (31 December 2022: € 239 million). These risk positions that are more than 90 days overdue are also considered impaired.

Deferred (restructured) risk positions

On-balance sheet and off-balance sheet risk exposures with forbearance measures totalled € 3,402 million as at the disclosure date (31 December 2022: € 2,252 million), of which € 2,209 million is considered to be serviced in accordance with the contract and € 1,193 million is considered non-performing. Impairments totalling € 305 million have already been recognised on the non-performing, deferred risk positions. Collateral and financial guarantees received for risk positions with forbearance measures totalled € 2,988 million, of which € 869 million was attributable to non-performing, forborne risk positions.

Receivables at risk of default are restructured by pbb Group in the event of economic difficulties of the borrower, provided that a positive going-concern forecast for the respective loan exposure is given. This is done by amending the underlying contractual relationships by means of unilateral or mutual declaration(s) of intent. Restructuring agreements are intended to increase the chances of realising the outstanding receivables or at least to reduce the default risk of the exposure. They usually include standstill agreements, maturity extensions, changed interest payment/repayment dates or the suspension of contractual agreements (e.g. financial covenants) so that the borrower can fulfil their contractual payment obligations again. The credit risk of restructured loans is managed by the Group's Credit Risk Management units.

Early warning system

In pbb Group's early warning system, criteria or thresholds (triggers) are defined for inclusion in the intensive management (watchlist) and in problem loan management (e.g. payment default, non-compliance with financial ratios - such as loan to value (LTV), interest service coverage (ISC)). Whether a trigger has been activated is monitored on an ongoing basis. If there is a corresponding indication, the exposure is analysed and presented to the Watchlist Committee. The Watchlist Committee then decides, taking into account the overall circumstances, whether a prompt transfer to intensive or problem loan management is appropriate. In this context and in the event of impairment triggers, the financial instruments are reviewed for indicators of impaired creditworthiness.

Indicators for watchlist and problem loans (restructuring and workout loans) include

- Watchlist Loans: There is a payment delay of more than 60 days or another defined early warning signal (e.g. the insolvency of a main tenant in the REF segment) applies.

- Restructuring loans: There is a default (triggered, for example, by a payment delay of more than 90 days or the insolvency of the borrower) or another contractual or regulatory trigger applies. In restructuring, the focus is on the active implementation of a restructuring concept with the aim of either returning to standard loan servicing or realising collateral on the open market without compulsory measures. A test for impaired creditworthiness is always carried out and, if necessary, a stage 3 valuation allowance is recognised in accordance with IFRS or a specific valuation allowance in accordance with HGB. Value adjustments and their underlying assumptions are reviewed regularly and on an ad hoc basis.

- Workout loans: There is no indication that the loan can be restructured. Forced measures have been or will be initiated. Where necessary, stage 3 valuation allowances have been recognised in accordance with IFRS and specific valuation allowances in accordance with HGB. Valuation allowances and their underlying assumptions are reviewed regularly and on an ad hoc basis.

The CRM REF Workout unit is responsible for determining and reviewing impairments in accordance with the relevant accounting regulations (HGB and IFRS).

EU CQ1: Credit quality of forborne exposures

		a	b	c	d	e	f	g	h
		Gross carrying amount/nominal amount of exposures with forbearance measures [1]				**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**		**Collateral received and financial guarantees received on forborne exposures [2]**	
		Performing forborne [3]	**Non-performing forborne [3]**			**On performing forborne exposures**	**On non-performing forborne exposures**		**of which: collateral and financial guarantees received on non-performing exposures with forbearance measures**
All figures in € million				**thereof: defaulted**	**thereof: impaired**				
005	Cash balances at central banks and other demand deposits	-	-	-	-	-	-	-	-
010	**Loans and advances**	**2,092**	**1,102**	**1,048**	**1,048**	**-26**	**-303**	**2,791**	**780**
020	Central banks	-	-	-	-	-	-	-	-
030	General governments	-	-	-	-	-	-	-	-
040	Credit institutions	-	-	-	-	-	-	-	-
050	Other financial corporations	21	-	-	-	-	-	21	-
060	Non-financial corporations	2,072	1,102	1,048	1,048	-26	-303	2,770	780
070	Households	-	-	-	-	-	-	-	-
080	**Debt securities**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
090	**Loan commitments given**	**116**	**92**	**41**	**41**	**0**	**-2**	**198**	**89**
100	**Total**	**2,209**	**1,193**	**1,088**	**1,088**	**-26**	**-305**	**2,988**	**869**

[1] Gross carrying amount (nominal value for loan commitments granted) before deduction of value adjustments on financial assets and provisions for credit risks, but after amortisation, before application of credit risk mitigation techniques and before credit conversion factors (CCF).
[2] The value of the collateral and guarantees recognised is limited to the carrying amount (nominal value for loan commitments granted) of the collateralised/guaranteed deferred risk positions.
[3] Exposures with forbearance measures in accordance with Article 47b CRR can be determined to be serviced in accordance with the contract or non-performing, depending on whether they fulfil the conditions of Article 47a CRR "Non-performing exposures".

EU CQ3: Credit quality of contractually serviced and non-performing exposures by days past due

		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount/nominal amount [1]											
		Performing exposures			Non-performing exposures [2]								
All figures in € million			Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	thereof: defaulted 2)
005	Cash balances at central banks and other demand deposits	3,540	3,540	-	-	-	-	-	-	-	-	-	-
010	**Loans and advances**	**39,890**	**39,821**	**69**	**1,540**	**806**	**278**	**216**	**103**	**123**	**0**	**14**	**1,486**
020	Central banks [3]	-	-	-	-	-	-	-	-	-	-	-	-
030	General governments	7,362	7,362	-	-	-	-	-	-	-	-	-	-
040	Credit institutions	1,695	1,695	-	-	-	-	-	-	-	-	-	-
050	Other financial corporations	1,211	1,211	-	-	-	-	-	-	-	-	-	-
060	Non-financial corporations	29,619	29,550	69	1,540	806	278	216	103	123	-	14	1,486
070	Whereof: SMEs	9,558	9,489	69	216	103	81	33	-	-	-	-	216
080	Households	4	4	-	1	-	-	-	-	-	-	-	1
090	**Debt securities**	**5,494**	**5,494**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	4,110	4,110	-	-	-	-	-	-	-	-	-	-
120	Credit institutions	1,355	1,355	-	-	-	-	-	-	-	-	-	-
130	Other financial corporations	29	29	-	-	-	-	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-
150	**Off-balance-sheet exposures**	**2,214**	---	**---**	**124**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**72**
160	Central banks	-	---	---	-	---	---	---	---	---	---	---	-
170	General governments	129	---	---	-	---	---	---	---	---	---	---	-
180	Credit institutions	-	---	---	-	---	---	---	---	---	---	---	-
190	Other financial corporations	8	---	---	-	---	---	---	---	---	---	---	-
200	Non-financial corporations	2,077	---	---	124	---	---	---	---	---	---	---	72
210	Households	-	---	---	-	---	---	---	---	---	---	---	-
220	**Total [4]**	**51,138**	**48,855**	**69**	**1,664**	**806**	**278**	**216**	**103**	**123**	**0**	**14**	**1,559**

[1] Gross carrying amount (nominal value for off-balance sheet items) before deduction of value adjustments on financial assets and provisions in the lending business, but after amortisation, before application of credit risk mitigation techniques and before credit conversion factors (CCF).
[2] Non-performing exposures in accordance with Article 47a CRR and defaulted exposures in accordance with Article 178 CRR.
[3] The categorisation of a counterparty according to the FINREP sectors was based on the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or, in the case of risk positions entered into jointly by several debtors, on the more significant or more decisive debtor.
[4] Including "Balances with central banks and sight deposits" recognised in line 005.

EU CQ4: Quality of non-performing exposures by geographical area

All figures in € million			a	b	c	d	e	f	g
			Gross carrying/nominal amount [1]				Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures [3]
				thereof: non-performing		thereof: subject to impairment [2]			
					thereof: defaulted				
010	**On-balance-sheet exposures [4]**		**46,925**	**1,540**	**1,486**	**46,479**	**-583**	**---**	**0**
1	(AT)	Austria	4,591	-	-	4,589	-1	---	-
2	(CZ)	Czech Republic	590	-	-	590	0	---	-
3	(DE)	Germany	13,905	346	346	13,678	-57	---	-
4	(ES)	Spain	1,955	-	-	1,955	-1	---	-
5	(FR)	France	6,675	58	58	6,664	-10	---	-
6	(GB)	United Kingdom	1,242	123	123	1,200	-92	---	-
7	(IT)	Italy	1,908	14	14	1,827	-12	---	-
8	(JE)	Jersey	744	84	84	744	-57	---	-
9	(LU)	Luxembourg	3,570	103	103	3,568	-78	---	-
10	(NL)	Netherlands	1,218	33	33	1,218	-2	---	-
11	(PL)	Poland	1,919	78	78	1,919	-12	---	-
12	(SE)	Sweden	1,181	-	-	1,181	-1	---	-
13	(US)	United States of America	4,665	653	599	4,622	-255	---	-
14		Other countries [5]	2,763	47	47	2,724	-6	---	-
020	**Off-balance-sheet exposures [4]**		**2,337**	**124**	**72**	---	---	**-6**	---
1	(CZ)	Czech Republic	44	-	-	---	---	-	---
2	(DE)	Germany	1,247	56	56	---	---	-2	---
3	(FR)	France	419	-	-	---	---	-	---
4	(GB)	United Kingdom	59	-	-	---	---	-	---
5	(JE)	Jersey	24	-	-	---	---	-	---
6	(LU)	Luxembourg	163	-	-	---	---	-	---
7	(NL)	Netherlands	37	-	-	---	---	-	---
8	(SE)	Sweden	56	-	-	---	---	-	---
9	(US)	United States of America	253	68	16	---	---	-3	---
10		Other countries [6]	35	-	-	---	---	-	---
030	**Total**		**49,262**	**1,664**	**1,559**	**46,479**	**-583**	**-6**	**0**

[1] Gross carrying amount (nominal value for off-balance sheet items) before deduction of value adjustments on financial assets and provisions in the lending business, but after amortisation, before application of credit risk mitigation techniques and before credit conversion factors (CCF).

[2] Impairment according to the three impairment levels of IFRS 9.

[3] Accumulated negative changes in fair value due to credit risk; for financial assets at fair value through profit or loss, a value adjustment is implied in the fair value.

[4] The regional allocation of risk positions to a country is based on the country of domicile of the direct counterparty (such as the direct borrower, counterparty or issuer of the securities).

[5] On-balance sheet credit risk positions: For reasons of materiality, pbb Group does not disclose all countries individually in accordance with the Pillar 3 framework, Annex XVI. The line "Other countries" summarises further countries whose share of on-balance sheet credit risk exposures is < 1% in each case: Aruba, Bangladesh, Belgium, Bermuda, Switzerland, Cameroon, Finland, Guernsey, Ghana, Gibraltar, Ireland, Japan, Cayman Islands (Cayman Islands), Liechtenstein, Latvia, Mauritius, Oman, Portugal, Romania, Saudi Arabia, Slovenia, Slovakia and British Virgin Islands (Virgin Islands). In addition, the "Other countries" line includes risk exposures to supranational organisations. In accordance with the Pillar 3 framework, Annex XVI, these are not allocated to the institution's country of domicile, but to this item.

[6] Off-balance sheet risk positions: For reasons of materiality, pbb Group does not disclose all countries individually in accordance with the Pillar 3 framework, Annex XVI. The line "Other countries" summarises further countries whose share in the off-balance sheet credit risk positions is < 1% each: Spain, Finland, Poland and Austria.

EU CQ5: Credit quality of loans and advances to non-financial corporations by economic sector

		a	b	c	d	e	f
		Gross carrying amount [1)]				**Accumulated impairment**	**Accumulated negative changes in fair value due to credit risk on non-performing exposures**
All figures in € million			**thereof: non-performing**	**thereof: defaulted**	**of which: loans and advances subject to impairment**		
010	Agriculture, forestry and fishing [2) 3)]	-	-	-	-	-	-
020	Mining and quarrying	-	-	-	-	-	-
030	Manufacturing	47	-	-	47	-	-
040	Electricity, gas, steam and air conditioning supply	26	-	-	26	-	-
050	Water supply	100	-	-	100	-	-
060	Construction	253	-	-	253	-	-
070	Wholesale and retail trade	100	-	-	100	-	-
080	Transport and storage	54	19	19	54	-1	-
090	Accommodation and food service activities	180	-	-	137	-2	-
100	Information and communication	-	-	-	-	-	-
110	Financial and insurance actvities	-	-	-	-	-	-
120	Real estate activities	29,693	1,520	1,466	29,548	-577	-
130	Professional, scientific and technical activities	96	-	-	96	-	-
140	Administrative and support service activities	81	-	-	81	-	-
150	Public administration and defence, compulsory social security	-	-	-	-	-	-
160	Education	67	-	-	67	-	-
170	Human health services and social work activities	459	-	-	459	-	-
180	Arts, entertainment and recreation	-	-	-	-	-	-
190	Other services	2	-	-	2	-	-
200	**Total**	**31,158**	**1,540**	**1,486**	**30,971**	**-581**	**0**

[1)] Gross carrying amount (nominal value for off-balance sheet items) before deduction of value adjustments on financial assets and provisions in the lending business, but after amortisation, before application of credit risk mitigation techniques and before credit conversion factors (CCF).
[2)] The classification according to the NACE code of the counterparty is based on the main business activity of the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or that of the most significant or decisive debtor. The NACE codes correspond to the NACE Regulation: Statistical Classification of Economic Activities in the European Community.
[3)] When categorising a counterparty, only those counterparties that fall into sectors related to non-financial corporations are taken into account. The FINREP sector "non-financial corporations" comprises corporations and quasi-corporations that are not engaged in financial intermediation activities, but mainly in the production of market goods and the provision of non-financial services, in accordance with Delegated Regulation (EU) 2021/451, Annex V.

Credit risk adjustments

This section describes the information in accordance with Article 442 point (b) CRR on rules and methods for credit risk adjustments.

Impairment losses

The rules on impairment under IFRS 9 are relevant for financial assets measured "at amortised cost" or "at fair value through other comprehensive income", for receivables from leases and for off-balance sheet obligations such as loan commitments and financial guarantees. The rules do not apply to equity instruments. For financial assets subsequently measured at fair value through profit or loss, an impairment loss is implied in the fair value. IFRS 9 contains a model in which allowances for credit losses are recognised at initial recognition of the financial asset (or at the time when pbb Group becomes a party to the loan commitment or financial guarantee contract) on the basis of the credit losses expected at that time. In accordance with IFRS 9.5.5.17, this is an unbiased and probability-weighted amount, for the determination of which various conditions and scenarios must be taken into account. It is clarified that this is a probability-weighted average and not the most probable amount.

Valuation allowances and provisions in the lending business

Risk provisioning in the lending business at initial recognition is generally based on the expected default events within the next twelve months (so-called stage 1). The twelve-month expected credit loss is the portion of lifetime expected credit losses that corresponds to the expected credit losses from default events that are possible for a financial instrument within twelve months of the reporting date. In the event of a significant increase in the credit risk of the financial asset in subsequent measurement (stage 2) or in the event of credit impairment (stage 3), the loss allowance must reflect the expected credit losses over the entire remaining term of the financial asset (lifetime expected credit loss). pbb Group does not apply the simplified approach to receivables from leases, but also divides them into impairment stages 1 and 2.

Under IFRS 9, the same definition of default is used as for regulatory purposes. A default is assumed if

- it is unlikely that the borrower will fulfil his payment obligations in full, or
- the borrower is more than 90 days overdue with significant arrears.

pbb Group determines the expected credit losses on an individual basis.

For the allocation to the three impairment stages of IFRS 9, pbb Group has developed test criteria which are very closely linked to the methods and instruments used for credit and risk monitoring. The practice of credit risk management also leads to an intensification of monitoring with increasing impairment levels. Every financial asset not recognised at fair value through profit or loss is allocated to stage 1 on initial recognition, provided its financial creditworthiness is not impaired. A financial asset moves to stage 2 if its credit risk increases significantly but its creditworthiness is not impaired. This is the case if

- there is a rebuttable presumption of a delay in payment of more than 30 days, or
- the financial asset is not investment grade and the multi-year probability of default on the balance sheet date is at least 2.5 times higher than the multi-year probability of default at the time of initial recognition of the financial asset.
- a regulatory forbearance (concession) measure was carried out for a performing (non-defaulting) financial instrument.

The 30-day payment default criterion can be refuted, for example, in the case of so-called technical overdue payments, including when the borrower transfers the amount owed to an incorrect account and corrects this at short notice.

Counterparties to receivables and securities whose creditworthiness has deteriorated compared to the time of initial recognition, but which still have an investment grade rating and are not 30 days in arrears, are classified as very low-risk when allocating the impairment levels.

A change to level 3 is necessary if the financial asset has an impaired credit rating. The creditworthiness of a financial asset is impaired if one or more events with a negative impact on the expected future cash flows of this financial asset have occurred. Indicators of impaired credit quality of a financial asset include observable data on the following events:

- significant financial difficulties of the issuer or the borrower;
- a breach of contract such as a default or delay in interest or redemption payments;
- Concessions which pbb Group makes to the borrower for economic or legal reasons in connection with the borrower's financial difficulties, but which pbb Group would not otherwise consider;
- if it becomes likely that the borrower will become insolvent or undergo other reorganisation proceedings;
- the disappearance of an active market for this financial asset due to financial difficulties; or
- the purchase or issue of a financial asset with a high discount that reflects the credit losses incurred.

For financial assets that are purchased or originated credit impaired (POCI), only the cumulative changes in lifetime expected credit losses since initial recognition are recognised as an impairment loss at the reporting date. For such financial assets, the expected credit losses are discounted using the credit-adjusted effective interest rate determined on initial recognition. From initial recognition, the credit-adjusted effective interest rate is applied to the amortised cost. In this way, interest income is recognised over the entire term of the asset, even if the borrower recovers. The interest income is to be attributed to the POCI asset; payments received are to be recognised in the same way as repayments. As at 31 December 2023 and 31 December 2022, pbb Group did not have any financial assets that were credit-impaired at the time of acquisition or origination.

Expected credit loss

pbb Group generally uses a model-based procedure to determine the amount of the expected credit loss. The regulatory risk parameters (probability of default (PD), loss given default (LGD)) as well as contractual information, such as the contractually agreed cash flows of the financial instruments, are used as the basis for stage 1 and 2 allowances. The comparison of the contractually agreed cash flows and the expected cash flows results, among other things, in the exposure measure to which the aforementioned risk parameters are linked when determining the expected losses. The expected cash flows also take into account expectations regarding early repayments (prepayment rates), expected extensions of loans (prolongation rates) and expected drawings of line portions not yet drawn (credit conversion factor, CCF). The PD risk parameter is determined on an individual borrower basis using customer-specific rating procedures. The input factors for these rating procedures include several customer-specific risk factors such as leverage, return ratios and similar quantitative indicators. The LGD risk parameter is determined using specific LGD models, which include in particular the expected recovery rate on the realisation of collateral or other assets, the transaction-specific ratio between the current collateral value and the carrying amount of the receivable and the expected period until the proceeds are received as key input factors.

The regulatory risk parameters are suitably transformed so that they fulfil the requirements of IFRS 9. These include the elimination of conservative adjustments made for regulatory purposes, the inclusion of macroeconomic factors for the purpose of point-in-time transformation and the change from the regulatory discount rate to the effective interest rate required by IFRS 9. In particular, these transformations ensure that the risk parameters are consistent with expectations. Historical data on rating migration together with forecasts of macroeconomic developments (e.g. unemployment rate, economic growth per country, 5-year swap rate per currency and - in the case of property financing - the development of collateral market values differentiated by property type and region) are used to determine the multi-year probabilities of default. The appropriate information is used depending on the customer type. When forecasting the indicators, pbb Group relies on both internal analyses and externally available data. Interest income is calculated by applying the effective interest rate to the gross carrying amount of the financial asset, i.e. the carrying amount before allowances for losses on loans and advances.

When determining point-in-time probabilities of default, economic forecasts from the ECB, other central banks and economic research institutes are used in particular for the unemployment rate and gross domestic product. For transactions in impairment stage 1, only the forecast for 2024 is used. For transactions in impairment level 2, the forecasts up to 2027 are used. From 2028, a convergence to the long-term average is modelled.

As of 31 December 2023, pbb Group has recognised a temporary adjustment of the expected credit losses in the form of a management overlay in order to reflect the current risk situation of the financing of office properties. The management overlay is described in detail in pbb Group's Annual Report 2023, in Note 50 "Financial assets at amortised cost after allowances (including receivables from finance leases)".

The expected credit loss of impairment stage 3 is determined on the basis of individual cash flows in several probability-weighted scenarios. The risk provision corresponds to the difference between the carrying amount of the asset and the present value of the expected future cash flows. The latter is calculated using the original effective interest rate. The expected future cash flows take into account the realisability of the collateral provided, such as land charges/mortgages. Interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset.

Depreciation and amortisation

A financial asset may have to be written down using a valuation allowance that has already been recognised if it is no longer reasonably expected to be recoverable. This is particularly the case if, in the course of realising collateral, it is foreseeable that a residual claim will remain and no further contributions can be expected from the debtor (e.g. due to insolvency/lack of assets). In justified individual cases, attempts are made to recover the residual claim in full or at least in part by means of enforcement measures.

In the financial year 2023, pbb Group recognised write-downs on financial assets (utilisation of allowances) in the amount of € 35 million.

Recognition in the balance sheet and income statement

Impairment losses of all three levels in accordance with IFRS 9 on financial assets in the measurement category at amortised cost are reported in the balance sheet under "Impairment losses on financial assets measured at amortised cost". The balances of these financial assets are shown before and after taking risk provisions into account. In the income statement, the value adjustments on these holdings are recognised in the risk provision result.

Impairments of all three levels in accordance with IFRS 9 on financial assets in the measurement category at fair value through other comprehensive income are recognised in the balance sheet under the equity item "Accumulated other comprehensive income". In the income statement, the value adjustments on these portfolios are recognised in the risk provision result.

Provisions for off-balance sheet lending business, such as irrevocable loan commitments and financial guarantees, are recognised on the basis of the impairment rules of IFRS 9 and reported on the liabilities side under "Provisions".

Credit risk mitigation techniques

This chapter shows the information pursuant to Article 453 CRR on the credit risk mitigation techniques used in pbb Group for credit risk (resulting from loans and advances, debt securities and off-balance sheet exposures) and counterparty credit risk (resulting from derivatives and securities financing transactions), both the types of collateral used and the main features of the rules and procedures for the valuation and management of this eligible collateral.

Significant collateral in the context of credit risk minimisation

The core business of pbb Group is commercial real estate finance (Real Estate Finance, REF) with a focus on Pfandbrief-eligible business. pbb Group takes the following material collateral into account in the context of credit risk mitigation (credit risk, counterparty credit risk):

- Real estate (mortgages)
- Sureties and guarantees
- financial securities.

Mortgages (real estate) are of particular importance for real estate financing. Furthermore, pbb Group accepts sureties and guarantees as well as financial collateral (mainly cash collateral and in some cases securities) as security. Financial collateral serves pbb Group as security within the framework of netting agreements for derivatives and securities financing transactions (securities lending/repo transactions).

pbb Group did not enter into any hedging transactions with credit derivatives (purchased or sold credit protection) in financial year 2023, neither as a protection buyer nor as a protection seller.

The guarantors are primarily financial institutions and public-sector customers. The guarantors have a very good credit rating. Risk Management & Control (RMC) regularly reports to pbb's Management Board on the largest guarantors as part of the risk reporting system.

Utilisation of collateral to reduce capital requirements

Physical collateral (real estate) is taken into account in the LGD calculation when estimating the loss given default to minimise credit risk. Financial collateral is taken into account to minimise credit risk when determining the exposure at default (EAD). Sureties and guarantees are taken into account to reduce credit risk through a regular PD substitution. This means that the lower risk weight of the guarantor is assigned to the secured portion of a receivable. In property financing, in addition to mortgages, financing collateral generally also includes rent assignments and the assignment of insurance benefits, which are not taken into account to reduce credit risk in accordance with the CRR.

The procedures for accepting collateral are set out in pbb Group's internal processing guidelines for each type of collateral. In order to enable legal enforceability, contractual standardisations are generally used, which are reviewed on an ongoing basis against the background of the changing legal environment. For this purpose, a Group-wide process has been set up to ensure that the enforceability of all CRR-relevant collateral is subject to ongoing legal monitoring. The calculation and determination of collateral values is documented in a comprehensible manner. Expert opinions used to estimate a liquidation value contain statements on the marketability of the collateral.

Risk concentrations within credit risk mitigation

Significant risk concentrations within the eligible hedging instruments used may exist on the property liens side in the naturally given correlated dependency of this tangible collateral on the general property market development of a country. The breakdown of the loan portfolio by region and by loan and property type is shown in the Risk and Opportunity Report of the Annual Report 2023 (published on pbb's website). Risk concentrations of this type are limited within pbb Group as part of country limit management.

Depending on the results of the internal rating process, each individual country or country group is assigned maximum limits within certain rating corridors which restrict pbb Group's business activities. All country ratings and country limits are reviewed at least once a year by the Corporate Development/Economic Analysis division.

Quantitative information on credit risk mitigation

The following table EU CR3 shows the credit risk exposures collateralised by eligible collateral on the basis of the net carrying amount (broken down into loans and advances, including balances with central banks and sight deposits, as well as debt securities), for which pbb Group calculates the risk-weighted exposure amounts using the advanced IRB approach (IRBA) based on internal bank rating procedures or the standardised approach (CRSA).

In addition, table EU CR4 in accordance with Article 453 letters g, h and i CRR shows the effects of eligible collateral for exposures treated in accordance with the standardised approach (CRSA) ("Credit risk - standardised approach" section) and table EU CR7-A in accordance with Article 453 letter g CRR shows the effects for exposures treated in accordance with the IRB approach ("Credit risk - IRB approach" section).

The table EU CR7 according to Article 453 letter j CRR regarding the effects of credit derivatives used as a credit risk mitigation technique is not relevant for pbb Group. As of the disclosure date, pbb Group has no credit derivatives in its portfolio.

EU CR3: Overview of credit risk mitigation techniques

		a	b	c	d	e
		Unsecured net carrying amount 3)	**Secured net carrying amount 1) 2)**			
				of which: secured by collateral 4)	**of which: secured by financial guarantees**	
All figures in € million						**of which: secured by credit derivatives**
1	Loans and advances	13,074	31,314	30,024	1,291	-
2	Debt securities	4,411	1,082	-	1,082	---
3	**Total**	**17,485**	**32,397**	**30,024**	**2,373**	**-**
4	of which: non-performing exposures	22	1,100	1,082	17	-
5	thereof: defaulted	144	928	---	---	---

1) EU CR3 shows the net carrying amount of the risk positions: Gross carrying amount after deduction of impairment losses on financial assets and after write-downs, but before application of credit risk mitigation techniques. Off-balance sheet items are not taken into account.
2) Exposures to which at least one credit risk mitigation mechanism is assigned in accordance with Part 3, Title II, Chapter 4 of the CRR. These are collateral/guarantees that can be taken into account to reduce risk when calculating the capital requirements for the lending business. The value of the collateral/guarantees recognised is limited to the net value of the collateralised/guaranteed risk positions.
3) Risk positions to which no credit risk mitigation technique has been applied, for which neither collateral has been pledged nor guarantees received. Loans and advances" in EU CR3 also include central bank balances and receivables from banks repayable on demand.
4) Risk positions collateralised by securities (primarily real estate/ mortgages).

Valuation and management of eligible collateral

Depending on the type of collateral, pbb Group applies various valuation, control and review procedures. These procedures are an essential part of the aforementioned event-driven and annual credit exposure review or new loan approval.

With regard to the valuation of the different types of collateral, pbb Group has established processing principles. The recoverability of the collateral provided is reviewed as part of the granting of the loan or the regular assessment of the borrower, the collateral or in the event of material changes. Collateral that is subject to particular risks is included in the monitoring process more intensively in accordance with regulatory requirements and in a risk-oriented manner.

The valuation of real estate liens is generally based on a written valuation report and is documented in writing. pbb Group monitors fluctuations in value on an ongoing basis using defined parameters.

Real estate

A written market and mortgage lending value appraisal is prepared by an independent property valuer for each property used as loan collateral. The mortgage lending value is primarily required for property collateral intended for the Pfandbrief cover pool (for the purpose of refinancing via Pfandbrief issues). External valuation reports are additionally subjected to a plausibility check by an internal employee (property analyst).

The regular monitoring and review of property collateral (monitoring and revaluation) is initially focussed on the market value of the properties:

> The aim of the monitoring or review is to identify properties and/or markets (or combinations of property types and markets) where there could be a potential loss in value. Monitoring is carried out on the basis of market data, files and information. A rough analysis of the individual properties is sufficient for this purpose.

> A revaluation ("revaluation or level 3 of monitoring") is carried out for properties for which a decline in market value of more than 10% or other significant deterioration in the underlying valuation assumptions is identified. In addition, the market value is revalued every three years. The three-year cycle is based on Article 208 (3) (b) CRR, which requires monitoring at least every three years.

> If there are indications that the mortgage lending value is also affected by a deterioration in value, the valuation is also reviewed and, if necessary, revalued in stage 4 of the monitoring process.

Further information on the quality aspects under which the properties in pbb Group are valued is described in the section "Risk hedging and risk mitigation" in the chapter "Management of counterparty credit risk (including counterparty credit risk)".

Sureties/guarantees

pbb Group recognises sureties and guarantees as collateral for the purposes of risk management and risk mitigation in accordance with Articles 213 to 215 CRR. In order to be recognised for credit risk mitigation, both the sureties/guarantees and the guarantors/guarantors must fulfil the regulatory requirements. Sureties and guarantees are recognised for credit risk mitigation through a regular PD substitution.

Financial collateral

Financial collateral (mainly cash collateral) serves pbb Group as collateral within the framework of netting agreements for derivatives and securities financing transactions (securities lending/repo transactions). For more information on the application of netting in the context of credit risk mitigation, the netting rules and financial collateral used by pbb Group, please refer to the following section "On-balance sheet and off-balance sheet netting" as well as the chapter "Counterparty Credit Risk".

On-balance sheet and off-balance sheet netting

Regulatory netting

As part of credit risk mitigation, pbb Group applies the regulatory requirements for off-balance sheet netting for derivative financial instruments as well as for securities lending/repo transactions, provided that the contractual agreements meet the requirements for risk-mitigating recognition in accordance with Article 296 CRR or Article 206 CRR. As of 31 December 2023, pbb Group has made use of derivative contractual netting agreements in the amount of € 0.4 billion and in the context of repo transactions in the amount of around € 2.3 billion.

Balance sheet netting

Derivatives cannot be netted in the balance sheet as they have different terms (e.g. different maturities or currency underlyings). The collateral agreements cannot be netted with the derivatives on the balance sheet either. Derivatives settled via Eurex Clearing are an exception. Under the European Market Infrastructure Regulation (EMIR), there is a clearing obligation for standardised over-the-counter (OTC) derivatives. For this purpose, Eurex Clearing is the central counterparty (CCP) used by pbb for clearing its OTC derivatives. On-balance sheet netting is applied for the derivatives concluded with Eurex Clearing. On-balance sheet netting is performed for each currency and, in addition to the derivative carrying amounts, also includes the collateral calculated and paid or received by Eurex Clearing in this context. As at 31 December 2023, on-balance sheet netting resulted in a reduction in total assets of € 1.4 billion for the derivatives settled via Eurex Clearing.

Securities lending/repo transactions are not netted in the balance sheet.

Framework agreements

For the documentation of its derivatives and securities lending/repo transactions, pbb Group uses the standard market master agreements (e.g. German Master Agreement for Financial Derivatives (DRV), ISDA Master Agreement or Global Master Repurchase Agreement (GMRA)) including the respective collateral agreements (e.g. collateralisation annex to the DRV or ISDA Credit Support Annex). The master agreements used for derivatives as well as for securities lending/repo transactions contain netting agreements according to which, for example, in the event of insolvency, a uniform claim is created by terminating and netting all transactions concluded under a master agreement, so that in the event of default of the counterparty, pbb only has a claim to the balance of the positive and negative market values of the individual transactions recognised or is obliged to pay them (so-called "close-out netting"). This reduces the credit risk in relation to the respective contractual partner. A prerequisite for risk-mitigating recognition is, among other things, a review of the validity and enforceability of the contractual netting agreement in the relevant legal system. At pbb Group, this is done both regularly and on an ad hoc basis by means of legal opinions.

Collateral agreements

Financial collateral, predominantly cash collateral but also securities in some cases, is accepted as collateral for these transactions. This is done on the basis of standard market collateral agreements (e.g. collateralisation annex to the DRV). Collateral is generally provided by way of full title transfer, and in the case of securities also by pledging. As a rule, pbb provides or receives cash collateral in EUR. If derivatives are cleared via a central counterparty, collateral is provided on the one hand by pledging securities and on the other hand by transferring cash collateral. Cash collateral is generally provided for bilateral repo transactions, while securities collateral is generally exchanged for repo transactions cleared via a central counterparty. In order to be recognised for the purpose of credit risk mitigation in accordance with CRR, the provision of collateral must meet the regulatory requirements. The validity and enforceability of the collateral is verified on the basis of legal opinions.

The transactions are valued daily. As a rule, the collateral agreements do not provide for any threshold amounts; there are only minimum transfer amounts. Further information on this can be found in the "Counterparty credit risk" chapter, section "Rating-dependent collateral agreements".

Credit risk - standardised approach

This chapter shows the information pursuant to Articles 444 and 453 (g), (h) and (i) CRR on on- and off-balance sheet credit risk exposures for which pbb Group calculates the risk-weighted exposure amounts according to the standardised approach (SACR). The pbb Group uses the standardised approach in accordance with Articles 111 et seq. CRR in addition to the advanced IRB approach based on internal rating procedures in accordance with Article 142 et seq. CRR, namely for the following portfolios.

Application of permanent partial use in accordance with Article 150 CRR

The following sub-portfolios in particular are subject to the standardised approach:

- Exposures to central governments/central banks, regional governments and public sector entities in accordance with Article 150 (1) (a) and (d) CRR
- Exposures to institutions in accordance with Article 150 (1) (b) CRR (including Eurex Clearing)
- Receivables from companies that generate the majority of their income outside the property sector
- Receivables from private individuals
- Credit risk exposures that belong to a discontinued business area in accordance with Article 150 (1) (c) CRR in conjunction with Section 14 SolvV (e.g. small-volume retail loans, customer creditworthiness is assessed using retail scoring)
- other credit risk positions for which no rating procedure authorised by the banking supervisory authority is used in accordance with the IRB approach.

Utilisation of rating agencies and export insurance agencies

Designated rating agencies

pbb Group exclusively uses external ratings from the rating agencies Standard & Poor's, Moody's and Fitch to assess creditworthiness in the standardised approach. The designations are unchanged compared to the previous year. Export insurance agencies, on the other hand, are not nominated for a credit assessment.

Allocated risk position classes

The aforementioned rating agencies are nominated for all CRSA asset classes.

Transfer of credit assessments

Issue ratings are not transferred to comparable receivables of the same or higher rank.

Assignment of external credit ratings

pbb Group uses the allocation of the external ratings of the rating agencies to the credit quality steps of the standardised approach as specified by the EBA in accordance with CRR.

Effect of credit risk mitigation

In the standardised approach, sureties and guarantees are taken into account to reduce credit risk through a regular substitution of the risk weight. This means that the lower risk weight of the guarantor is assigned to the collateralised portion of a receivable. This means that the collateralised portion of an IRBA receivable (e.g. of a company) is reported with the lower risk weight of the guarantor (e.g. a public corporation) in the standardised approach, or that guaranteed CRSA receivables are assigned to the lower risk weight and the risk position class of the guarantor. The guarantors are primarily financial institutions and public-sector clients. At pbb Group, credit risk exposures to public-sector clients and financial institutions are treated using the standardised approach.

Quantitative disclosures on credit risk exposures under the standardised approach

The following tables EU CR4 and EU CR5 in accordance with Articles 444 letter e and 453 letters g, h and i CRR show the exposure values (before and after credit risk mitigation) and the risk-weighted exposure amounts (RWA), the risk weights and the RWA density as well as the effects of the credit conversion factors (CCF) used and of eligible collateral for the on-balance sheet and off-balance sheet SACR credit exposures, each broken down by exposure class.

EU CR4: Standardised approach - credit risk and effect of credit risk mitigation

		a	b	c	d	e	f
	Exposure classes	**Exposures before CCF and before CRM [1]**		**Exposures post CCF and post CRM [2]**		**RWAs and RWAs density**	
All figures in € million, unless otherwise stated		**On-balance-sheet exposures**	**Off-balance-sheet exposures**	**On-balance-sheet exposures**	**Off-balance-sheet amount**	**RWAs [3]**	**RWAs density[4] (%)**
1	Central governments or central banks	8,872	-	10,309	-	24	0.23
2	Regional government or local authorities	4,151	80	4,677	40	379	8.04
3	Public sector entities	1,584	-	1,455	-	81	5.59
4	Multilateral development banks	271	-	271	-	-	-
5	International organisations	290	-	290	-	-	-
6	Institutions	1,271	-	390	-	81	20.83
7	Corporates	1,177	2	256	1	257	99.72
8	Retail	-	-	-	-	-	75.00
9	Secured by mortgages on immovable property	782	38	782	19	309	38.54
10	Exposures in default	19	-	1	-	2	112.97
11	Exposures associated with particularly high risk	64	32	64	17	121	150.00
12	Covered bonds	328	-	328	-	33	10.00
13	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14	Collective investment undertakings	3	-	3	-	33	1,250.00
15	Equity	-	-	-	-	-	-
16	Other items [5]	111	-	111	-	278	250.00
17	**Total**	**18,921**	**152**	**18,935**	**78**	**1,598**	**8.41**

[1] Net value of CRSA risk positions: Gross carrying amount after deduction of value adjustments/provisions and write-downs, but before application of credit risk mitigation techniques and credit conversion factors (CCF).
[2] CRSA exposure at default (EAD) both after deduction of value adjustments/provisions and write-downs and after application of credit risk mitigation techniques and credit conversion factors (CCF).
[3] Risk-weighted CRSA exposure amounts (risk-weighted assets, RWA).
[4] RWA density (%): Calculated by dividing the RWA per CRSA exposure class (column e) by the respective EAD (column c plus d).
[5] Deferred tax assets that rely on future profitability and arise from temporary differences.

EU CR5: Standardised approach

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure classes	**Risk weight**															**Total**	**Of which unrated** [2]
All figures in € million		**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Others**		
1	Central governments or central banks	10,199	-	-	-	109	-	-	-	-	-	1	-	-	-	-	10,309	2,959
2	Regional government or local authorities	2,820	-	-	-	1,897	-	-	-	-	-	-	-	-	-	-	4,716	3,651
3	Public sector entities	1,127	-	-	-	298	-	17	-	-	13	-	-	-	-	-	1,455	1,267
4	Multilateral development banks	271	-	-	-	-	-	-	-	-	-	-	-	-	-	-	271	-
5	International organisations	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	290	-
6	Institutions	-	-	-	-	379	-	11	-	-	-	-	-	-	-	-	390	310
7	Corporates	-	-	-	-	1	-	-	-	-	254	2	-	-	-	-	258	228
8	Retail exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Exposures secured by mortgages on immovable property	-	-	-	-	-	539	262	-	-	-	-	-	-	-	-	801	801
10	Exposures in default	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1
11	Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	81	-	-	-	-	81	-
12	Covered bonds	-	-	-	328	-	-	-	-	-	-	-	-	-	-	-	328	-
13	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Units or shares in collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3	3
15	Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Other items [3]	-	-	-	-	-	-	-	-	-	-	-	111	-	-	-	111	-
17	**Total**	**14,706**	**0**	**0**	**328**	**2,684**	**539**	**290**	**0**	**0**	**268**	**85**	**111**	**0**	**3**	**0**	**19,013**	**9,219**

[1] EU CR5 shows the CRSA exposure at default (EAD) after deduction of value adjustments/provisions and write-downs as well as after application of credit risk mitigation techniques and credit conversion factors (CCF).
[2] A rating from a recognised rating agency (External Credit Assessment Institutions, ECAI) is not available.
[3] Deferred tax assets that rely on future profitability and arise from temporary differences.

Credit risk - IRB approach

This chapter shows the information pursuant to Articles 452 and 453 (g) and (j) and 438 (h) CRR on on- and off-balance sheet credit risk exposures for which the pbb Group has calculated the risk-weighted exposure amounts using the advanced IRB approach based on internal rating procedures pursuant to Article 142 et seq. CRR as of the disclosure date.

Following the introduction of Basel IV in the EU, pbb Group plans to introduce the Foundation Internal Ratings Based Approach (F-IRB) as the relevant model and risk standard for the majority of the portfolio and to apply the standardised approach in all other respects, and has informed the ECB accordingly. In a transitional phase, risk weights calibrated to standardised model parameters could be temporarily applied for the calculation of RWA until the F-IRB is applied, which would result in a corresponding increase in RWA and thus a reduction in the reported capital ratios during the transitional phase.

Authorised IRB approaches

For the advanced IRB approach, pbb Group has received approval to use the rating systems listed in the following figure EU CRE. An extension of the IRBA coverage ratio to new exposure classes in the form of an implementation plan is not planned.

Internal rating systems must fulfil the minimum requirements for the use of the IRB approach in accordance with Articles 143 and 144 CRR. In addition to methodological and procedural/organisational requirements, the rating systems must have proven their suitability for the risk classification of both existing and new business. Rating or assessment systems within the meaning of Article 142 CRR are understood as the entirety of all methods, procedures, controls, data collection and IT systems that are used to assess credit risks, to assign risk positions to credit rating grades or categories and to quantify default and loss estimates for a specific type of risk position.

The PD, LGD and CCF rating systems of pbb Group largely follow a through-the-cycle philosophy, although the structure of this philosophy may differ between the various models due to the risk factors taken into account in the model, among other things. Current default rates, loss ratios and CCF ratios may therefore deviate from the through-the-cycle forecasts depending on the status of the economic cycle.

Types of risk positions

The allocation of an obligor of an IRBA credit risk exposure to the PD, LGD and CCF rating systems is ensured in pbb Group by the defined areas of application of the rating systems. Compliance with the areas of application is checked in the rating process or is ensured by the system.

The IRBA exposure classes "Central governments or central banks", "Institutions" and "Retail business" do not occur in the pbb Group. For its equity exposures, pbb Group applies the simple IRBA risk weight for equity exposures in accordance with Article 155 (2) CRR.

For the "Corporates" risk position class (including specialised lending), rating systems are used that consist of statistical model cores, which are supplemented by expert model components in the risk classification. For all rating systems used, a follow-up rating is carried out at least once a year after the initial rating. A new rating is carried out during the year if there is significant information that influences the credit rating. All relevant input values and the results of the ratings carried out are stored in the data processing system so that a complete rating history is available for each debtor or guarantor and each transaction exposed to credit risk. Debtors are assigned to PD classes on the basis of default probabilities according to a 27-stage PD master scale or using tables that map letter ratings to PD classes depending on the segment.

The definition of default used in pbb Group corresponds to Article 178 CRR.

Rating systems under the IRB approach (EU CRE)

No.	Para-meter	Model	Exposure classes	Scope [1]	Modelling approach [2]
PD rating systems					
1	PD	SPV developer	Corporates/ Specialised financing	The obligor is an SPV (special-purpose vehicle), whereby the financed property/property portfolio is the sole business purpose and asset of the SPV and the liability is limited to the SPV (non-recourse financing)	Based on statistical default models
2	PD	SPV investors	Corporates/ Specialised financing		
3	PD	Housing associations	Corporates	Real estate customers whose main business comprises management of their own housing stock and whose credit standing is essentially related to this aspect	
4	PD	Investors who prepare balance sheets	Corporates	Customers who prepare balance sheets and whose main income is derived from real estate assets	
5	PD	Investors who do not prepare balance sheets	Corporates	Customers who do not prepare balance sheets, whose main income is derived from real estate assets	
LGD rating systems					
6	LGD	International real estate financing (defaulted and non-defaulted obligors)	Corporates incl. specialised lending	Secured property financing, with main emphasis outside Germany	Stochastic simulation methods
7	LGD	National real estate financing (defaulted and non-defaulted obligors)	Corporates incl. specialised lending	Secured property financing, with main emphasis within Germany	Structure model
CCF rating system					
8	CCF	Credit conversion factor	Corporates incl. specialised lending	Mortgage loans	Historical mean

[1] Simplified presentation of the areas of application of the rating procedures. The exact areas of application are defined in the relevant work instructions.
[2] Methodology underlying the rating procedure.

PD rating systems

The PD rating systems for commercial property financing are based on logistic regression models that were developed and calibrated on the basis of historical internal borrower data (default information and qualitative and quantitative risk factors) and expert assessments. The calibration is based on data for a period of at least 7 years. The risk factors are weighted and aggregated into a score, which is transformed into an individual probability of default. This is later translated into a PD class using a standardised PD master scale. The PD rating systems for commercial property financing generally take into account information about the borrower's property or property portfolio (e.g. quality of location, vacancy rate, regional information) and information about the borrower itself (e.g. commercial/technical skills, information about the customer-bank relationship) in addition to traditional key figures such as the ratio of the loan amount to the market value of a property or the debt service coverage ratio.

In addition to quantitative and qualitative risk factors, pbb Group's PD rating systems also take into account so-called warning signals to varying degrees. Warning signals generally reflect rare events, such as a negative feature which has an adverse effect on creditworthiness, but which has a significant impact on the borrower's creditworthiness if it occurs. In addition, pbb Group's PD rating systems ensure that the PD of a borrower cannot be better than the PD of the country relevant for the borrower. This so-called sovereign ceiling means that additional risks caused by the state, such as transfer risks, are taken into account when preparing the rating for a client.

pbb Group uses a standardised PD master scale with 27 PD classes for borrowers who have not yet defaulted, which is the same for all rating systems and across all exposure classes, thus making the rating classification comparable across all credit risk exposures. The 27 PD classes of the PD master scale are assigned clear probabilities of default as PD estimators as well as upper and lower limits for the probabilities of default.

LGD rating systems

The direct result of pbb Group's LGD rating systems is loss ratio estimates in per cent, which relate to the exposure at default (EAD).

The LGD rating system for international commercial property financing is based on a stochastic simulation method that simulates future macroeconomic developments as well as future developments specific to the property market and calculates the effects on cash flows and the property market value of the specific financing. Historical defaults from 2008 onwards are taken into account when calibrating the model.

The LGD rating system for property financing in Germany follows a structural approach in which the market value of the property collateral plays a central role in the LGD estimate. Individual parameters of the model (e.g. recovery rates, settlement periods) are determined for differentiated segments (including property types) on the basis of historical data from pbb Group and the LGD data pooling initiative of the Association of German Pfandbrief Banks (VdP). As a rule, data from at least 2008 is taken into account.

Downturn analyses and statistical significance tests are used for the individual LGD rating systems to ensure that the models are suitable for forecasting downturn LGDs.

CCF rating system

pbb Group has a model for forecasting a credit conversion factor (CCF) for mortgage loans. This is based on the observed drawing behaviour of historical internal defaults since 2008 in the period twelve months before default. A CCF of 100% is used for all other products (e.g. guarantees).

Further utilisation of internal estimates

The internal estimates of the probability of default (PD) and the loss given default (LGD) are important parameters for risk management and the lending decision. As part of the lending decision process, these risk parameters are taken into account to determine the risk and equity costs, which form the basis for risk-adjusted pricing and the lending decision.

Expected loss (EL) classes are derived from the risk parameters PD and LGD, which form the basis for the allocation of responsibilities within pbb Group as part of credit approval and loan processing.

The results of the internal rating systems are further incorporated into the economic risk-bearing capacity calculation (ICAAP) and are taken into account when determining the balance sheet risk provisioning.

Functions and control mechanisms for IRBA rating systems

The Group Risk Committee (GRC) is responsible for developing and validating the rating systems within pbb Group. The GRC is a sub-committee of the Management Board and is the decision-making committee with regard to issues relating to risk methodology, risk parameterisation and risk monitoring as well as relevant guidelines.

The GRC commissions the development of new models or model enhancements, validation concepts and the implementation of validations in the Risk Management & Control (RMC) division. The RMC division is independent of the divisions responsible for initiating and concluding transactions. The credit risk monitoring unit, which is part of this division, is responsible for the development, introduction, maintenance, monitoring and further development of all rating systems throughout the Group. The resulting findings are presented to the GRC and must be approved by the GRC.

All PD and LGD rating systems are subject to annual validation. Among other things, the calibration, selectivity and stability of the methods, the data quality and the model design are reviewed on the basis of statistical and qualitative analyses and user feedback.

In the LGD rating system for property financing in Germany, pbb Group also participates in the pool validation at the level of the Association of German Pfandbrief Banks (VdP).

There are technical control mechanisms in place to check the completeness and plausibility of data entries in the rating systems, such as approval based on the dual control principle.

As a process-independent body, Internal Audit regularly reviews the appropriateness of the internal rating systems, including compliance with the minimum requirements for the use of the rating systems and any procedural changes made.

Reporting on IRBA rating systems

All validation reports are presented to and approved by the Group Risk Committee (GRC).

Quantitative disclosures on credit risk exposures under the IRB approach

The following tables EU CR6 and EU CR6a in accordance with Article 452 letters b and g CRR show the on- and off-balance sheet credit risk exposures for the portfolios that fall within the scope of the IRB approach and have been rated using a rating procedure approved by the supervisory authorities. They show the main IRBA parameters used to calculate the capital requirements. Table EU CR6 is only shown for the exposure classes relevant for pbb Group. The IRBA exposure classes "Central governments or central banks", "Institutions" and "Retail business" do not occur in pbb Group. For its equity exposures, pbb Group applies the simple IRBA risk weight for equity exposures in accordance with Article 155 (2) CRR.

In addition, the EU CR7-A table in accordance with Article 453 letter g CRR shows the effects of eligible collateral in the IRB approach.

The EU CR7 table pursuant to Article 453 (j) CRR regarding the impact of credit derivatives used as a credit risk mitigation technique on risk-weighted exposure amounts (RWA) is not relevant for pbb Group. The pbb Group continues to have no credit derivatives in its portfolio.

Table EU CR8 in accordance with Article 438 letter h CRR shows the changes in RWA in the fourth quarter of 2023 and the main reasons for this.

EU CR6: IRB approach - credit exposures by exposure class and PD range

	a	b	c	d	e	f	g	h	i	j	k	l	m
A-IRB	**PD range [1]**	**On-balance sheet exposures [2]**	**Off-balance-sheet exposures pre-CCF [3]**	**Exposure weighted average CCF [4]**	**Exposure post CCF and post CRM [5]**	**Exposure weighted average PD (%) [6]**	**Number of obligors**	**Exposure weighted average LGD (%) [7]**	**Exposure weighted average maturity (years)**	**Risk weighted exposure amount after supporting factors [8]**	**Density of risk weighted exposure amount (%) [9]**	**Expected loss amount**	**Value adjustments and provisions**
All figures in € million, unless otherwise stated													
Corporates - SMEs	0.00 to <0.15	15	-	-	15	0.09	15	4.49	4	-	1.96	-	-
	0.00 to <0.10	2	-	-	2	0.05	3	5.21	1	-	1.24	-	-
	0.10 to <0.15	13	-	-	13	0.10	12	4.38	4	-	2.07	-	-
	0.15 to <0.25	64	-	-	64	0.20	34	2.80	4	2	2.66	-	-
	0.25 to <0.50	1,021	23	0.50	1,032	0.37	69	6.42	4	78	7.60	-	-
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <2.50	442	30	0.63	460	1.10	27	12.74	4	103	22.49	1	-
	0.75 to <1.75	441	30	0.63	459	1.10	26	12.75	4	103	22.51	1	-
	1.75 to <2.5	1	-	-	1	2.00	1	2.78	4	-	5.62	-	-
	2.50 to <10.00	1	-	-	1	2.76	3	3.80	2	-	7.20	-	-
	2.5 to <5	1	-	-	1	2.76	3	3.80	2	-	7.20	-	-
	5 to <10	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	10 to <20	-	-	-	-	-	-	-	-	-	-	-	-
	20 to <30	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	4	-	-	4	100.00	2	24.91	2	2	62.50	1	-1
Subtotal		**1,548**	**53**	**0.57**	**1,576**	**0.81**	**150**	**8.14**	**4**	**186**	**11.83**	**2**	**-1**

A-IRB	a	b	c	d	e	f	g	h	i	j	k	l	m
	PD range [1)]	**On-balance sheet exposures [2)]**	**Off-balance-sheet exposures pre-CCF [3)]**	**Exposure weighted average CCF [4)]**	**Exposure post CCF and post CRM [5)]**	**Exposure weighted average PD (%) [6)]**	**Number of obligors**	**Exposure weighted average LGD (%) [7)]**	**Exposure weighted average maturity (years)**	**Risk weighted exposure amount after supporting factors [8)]**	**Density of risk weighted exposure amount (%) [9)]**	**Expected loss amount**	**Value adjustments and provisions**
All figures in € million, unless otherwise stated													
Corporates - specialised lending [10)]	0.00 to <0.15	233	-	-	233	0.10	4	14.17	4	23	9.93	-	-
	0.00 to <0.10	-	-	-	-	-	-	-	-	-	-	-	-
	0.10 to <0.15	233	-	-	233	0.10	4	14.17	4	23	9.93	-	-
	0.15 to <0.25	410	-	-	410	0.20	12	23.97	3	77	18.67	-	-1
	0.25 to <0.50	4,145	31	0.54	4,162	0.39	92	17.72	3	917	22.04	3	-8
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <2.50	11,711	250	0.55	11,848	1.39	181	27.02	3	6,472	54.63	44	-60
	0.75 to <1.75	9,294	175	0.57	9,393	1.23	146	26.66	3	4,992	53.14	31	-33
	1.75 to <2.5	2,417	75	0.50	2,455	2.00	35	28.40	2	1,480	60.30	14	-26
	2.50 to <10.00	7,470	1,370	0.71	8,441	4.63	128	26.37	2	5,633	66.74	96	-80
	2.5 to <5	3,974	565	0.60	4,314	3.05	66	29.35	2	2,949	68.36	38	-45
	5 to <10	3,495	805	0.78	4,127	6.29	62	23.27	2	2,684	65.05	58	-35
	10.00 to <100.00	905	267	0.67	1,083	12.73	18	19.64	2	822	75.90	29	-22
	10 to <20	832	262	0.67	1,008	11.66	16	18.48	2	672	66.67	22	-16
	20 to <30	73	5	0.50	75	27.00	2	35.16	2	150	199.86	7	-6
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	1,463	72	0.67	1,511	100.00	27	31.78	1	944	62.50	405	-413
Subtotal		**26,336**	**1,990**	**0.68**	**27,688**	**8.02**	**462**	**25.24**	**3**	**14,889**	**53.78**	**577**	**-584**

A-IRB	a	b	c	d	e	f	g	h	i	j	k	l	m
	PD range [1]	On-balance sheet expo-sures [2]	Off-balance-sheet expo-sures pre-CCF [3]	Exposure weighted average CCF [4]	Exposure post CCF and post CRM [5]	Exposure weighted average PD (%) [6]	Number of obligors	Exposure weighted average LGD (%) [7]	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors [8]	Density of risk weighted exposure amount (%) [9]	Expected loss amount	Value adjust-ments and provisions
All figures in € million, unless otherwise stated													
Corporates - others	0.00 to <0.15	936	-	-	927	0.09	22	0.92	4	8	0.84	-	-
	0.00 to <0.10	158	-	-	158	0.05	3	1.21	5	2	0.95	-	-
	0.10 to <0.15	778	-	-	769	0.10	19	0.86	4	6	0.82	-	-
	0.15 to <0.25	598	-	-	596	0.20	14	5.94	4	44	7.38	-	-
	0.25 to <0.50	584	63	0.50	616	0.35	18	25.22	4	282	45.72	1	-
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <2.50	154	-	-	154	1.11	5	6.86	4	25	16.51	-	-1
	0.75 to <1.75	154	-	-	154	1.11	5	6.86	4	25	16.51	-	-1
	1.75 to <2.5	-	-	-	-	-	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	2.5 to <5	-	-	-	-	-	-	-	-	-	-	-	-
	5 to <10	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	10 to <20	-	-	-	-	-	-	-	-	-	-	-	-
	20 to <30	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		**2,273**	**63**	**0.50**	**2,292**	**0.28**	**60**	**9.15**	**4**	**359**	**15.66**	**1**	**-1**
Total (all exposure classes)		**30,157**	**2,106**	**0.67**	**31,556**	**7.10**	**672**	**23.22**	**3**	**15,434**	**48.91**	**579**	**-585**

[1] PD ranges for the estimated probability of default (PD) without taking into account substitution effects due to credit risk mitigation techniques.
[2] Gross carrying amount before deduction of valuation allowances (but after amortisation) and before application of credit risk mitigation techniques.
[3] Nominal value before deduction of provisions and before the application of credit risk minimisation techniques and credit conversion factors (CCF).
[4] Exposure-weighted average conversion factor for off-balance sheet exposures, weighted by the off-balance sheet exposure according to column (c).
[5] IRBA exposure at default (EAD) after application of credit risk mitigation techniques and credit conversion factors (CCF), but before deduction of value adjustments/provisions.
[6] Exposure-weighted average probability of default (PD), weighted by the exposure value in accordance with column (e).
[7] Exposure-weighted average loss given default (LGD), weighted by the exposure value in accordance with column (e).
[8] Risk-weighted IRBA exposure amounts (risk-weighted assets, RWA) after support factors for SMEs and infrastructure in accordance with Articles 501 and 501a CRR. IRBA exposure classes "Equity investments" and "Other assets that are not credit obligations" that are not based on own LGD and/or CCF estimates are not recognised.
[9] RWA density (%): Calculated by dividing the RWA (column j) by the respective EAD (column e).
[10] Excluding specialised lending within the meaning of Article 153 (4) CRR.

EU CR6-A: Scope of use of IRB and standardised approach

All figures in € million, unless otherwise stated		a Exposure value as defined in Article 166 CRR for exposures subject to IRB approach 1)	b Total exposure value for exposures subject to the Standardised approach and to the IRB approach 2)	c Percentage of total exposure value subject to the permanent partial use of the SA (%) 3)	d Percentage of total exposure value subject to IRB Approach (%) 4)	e Percentage of total exposurevalue subject to a roll-out plan (%) 5)
1	Central governments or central banks	-	15,498	100	-	-
1.1	thereof: Regional governments or local authorities	---	4,191	100	-	-
1.2	thereof: Public sector entities	---	1,874	100	-	-
2	Institutions	-	1,598	100	-	-
3	Corporates	31,570	33,692	6.30	-	93.70
3.1	of which: Corporates - Specialised lending, excluding slotting approach	---	27,768	0.29	-	99.71
3.2	thereof: Corporates - Specialised lending under slotting approach	---	-	-	-	-
4	Retail	-	1	100	-	-
4.1	thereof: Retail - Secured by real estate SMEs	---	-	-	-	-
4.2	thereof: Retail - Secured by real estate non-SMEs	---	1	100	-	-
4.3	thereof: Retail - Qualifying revolving	---	-	-	-	-
4.4	thereof: Retail - Other SMEs	---	-	-	-	-
4.5	thereof: Retail - Other non-SMEs	---	-	-	-	-
5	Equity	-	-	-	-	-
6	Other non-credit obligation assets	70	182	61.28	-	38.72
7	**Total**	**31,641**	**50,971**	**37.92**	**-**	**62.08**

1) IRBA exposure at default (EAD) values for risk positions subject to the IRB approach.
2) IRBA and CRSA exposure values for determining the total exposure measure in accordance with Article 429 (4) CRR for calculating the leverage ratio.
3) Share of exposures subject to the standardised approach (partial use in accordance with Article 150 CRR) in the total exposure value in accordance with column (b).
4) Share of risk positions subject to the IRB approach in the total risk position value according to column (b).
5) Share of exposures for which the IRB approach is to be gradually introduced in accordance with Article 148 CRR in the total exposure value according to column (b).

EU CR7-A: IRB approach - disclosure of the extent of the use of credit risk mitigation techniques

		a	b	c	d	e	f	g	h	i	j	k	l	m	n
		Total exposures [1]	**Credit risk mitigation techniques** [2]											**Credit risk mitigation methods in the calculation of RWEAs**	
			Funded credit protection (FCP)									**Unfunded credit protection (UFCP)**		**RWA without substitution effects (reduction effects only)** [3]	**RWA with substitution effects (both reduction and sustitution effects)** [4]
			Part of exposures covered by Financial Collaterals (%)	**Part of exposures covered by Other eligible collaterals (%)**				**Part of exposures covered by Other funded credit protection (%)**				**Part of exposures covered by Guarantees (%)**	**Part of exposures covered by Credit Derivatives (%)**		
	A-IRB				**Part of exposures covered by Immovable property Collaterals (%)**	**Part of exposures covered by Receivables (%)**	**Part of exposures covered by Other physical collateral (%)**		**Part of exposures covered by cash on deposit (%)**	**Part of exposures covered by Life insurance policies (%)**	**Part of exposures covered by instruments held by a third party (%)**				
All figures in € million, unless otherwise stated															
1	Central governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Corporates	31,556	-	97.91	97.91	-	-	-	-	-	-	-	-	15,434	15,434
3.1	thereof: Corporates - SMEs	1,576	-	99.87	99.87	-	-	-	-	-	-	-	-	186	186
3.2	thereof: Corporates - Specialised lending	27,688	-	97.63	97.63	-	-	-	-	-	-	-	-	14,889	14,889
3.3	thereof: Corporates - Other	2,292	-	99.98	99.98	-	-	-	-	-	-	-	-	359	359
4	Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	**Total**	**31,556**	**0**	**97.91**	**97.91**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15,434**	**15,434**

[1] Exposure at default (EAD) according to credit conversion factors (CCF), but without taking into account credit risk mitigation techniques/substitution effects due to a guarantee.
[2] The collateral shown in columns (b) to (l) shows the share of the risk positions collateralised by it in the total risk positions as per column (a). The value of the collateral is based in each case on the value of the collateralised risk position.
[3] Risk-weighted IRBA exposure amounts (risk-weighted assets, RWA) according to credit risk mitigation techniques. The categorisation into an IRBA risk exposure class was based on the relevant risk exposure class of the original debtor.
[4] Risk-weighted IRBA exposure amounts (risk-weighted assets, RWA) according to credit risk mitigation techniques. The categorisation into an IRBA risk exposure class is based on the relevant risk exposure class of the protection seller.

Credit risk positions

The relevant regulatory exposure figure for determining risk-weighted assets (RWA) and calculating capital requirements is the exposure at default (EAD). The CRR-compliant EAD for IRBA credit risk positions represents the outstanding exposure in the event of default and corresponds to the IFRS carrying amount (including accrued interest) for most products.

In the case of an existing committed free credit line, this - multiplied by the product-specific credit conversion factor (CCF) - is included as a further component in the EAD. The CCF indicates how much of a free line is expected to be utilised within one year before a possible default. The CCF is currently 50% to 100% for mortgage loans and 100% for all other products (e.g. guarantee loans).

The EAD is calculated for all receivables, regardless of whether a default event has actually occurred or not.

For the on- and off-balance sheet IRBA credit risk positions, the EAD amounts to € 31,556 million (30 June 2023: € 30,645 million) and the RWA to € 15,434 million (30 June 2023: € 13,973 million). This does not include the exposure classes "Equity investments" and "Other assets that are not credit obligations", as these are not based on own LGD and/or CCF estimates.

The main differences between the aforementioned EAD (the exposure value in accordance with Article 166 CRR) and the exposure value in accordance with Article 429 (4) CRR (for calculating the leverage ratio total exposure measure) shown in EU CR6-A, column b are as follows:

- Under the IRB approach, impairments on financial assets (levels 1 to 3) and provisions for off-balance sheet lending business are not deducted from the carrying amount on the balance sheet, but are recognised in the expected loss (EL) value adjustment comparison.
- Internal credit conversion factors (CCFs) are used in the IRBA approach, while the CCFs of the standardised approach (CRSA) are used to calculate the leverage ratio.

The total risk-weighted IRBA exposure amounts (RWA), i.e. including the exposure classes "Equity investments" and "Other assets that are not loan obligations", amount to € 15,506 million (30 June 2023: € 14,020 million and 30 September 2023: € 14,710 million). The main reasons for the increase in RWA in the fourth quarter of 2023 (€ +796 million compared to 30 September 2023) are shown in table EU CR8.

EU CR8: RWA flow statement for credit risks in accordance with the IRB approach

All figures in € million		a **Risk weighted exposure amount [1)]**
1	**Risk weighted exposure amount as at 30.06.2023**	**14,710**
2	Asset size (+/-)	860
3	Asset quality (+/-)	473
4	Model updates (+/-)	-
5	Methodology and policy (+/-)	-
6	Acquisitions and disposals (+/-)	-
7	Foreign exchange movements (+/-)	-120
8	Other (+/-)	-417
9	**Risk weighted exposure amount as at 30.09.2022**	**15,506**

[1)] Risk-weighted IRBA exposure amounts (risk-weighted assets, RWA) after application of the SME support factor in accordance with Article 501 CRR, including the IRBA exposure classes "Equity investments" and "Other assets that are not credit obligations".
Counterparty credit risk exposures (derivatives and securities financing transactions), on the other hand, are not included in EU CR8.

The main factor influencing the increase in RWA in the IRB approach was the new commercial property financing business transacted in the fourth quarter of 2023, which significantly exceeded regular and early repayments (EU CR8, line 2). Rating downgrades for loan exposures (EU CR8, line 3) also had an increasing effect on RWA. Various effects had an offsetting impact on RWA (EU CR8, line 8), in particular netting effects for extensions of property financing and changes in the allocation of risk positions to the risk position classes (corporates versus small and medium-sized enterprises, SMEs). Currency effects (EU CR8, line 7), particularly for the US dollar (USD), the Swedish krona (SEK) and the British pound (GBP), also had an overall reducing effect on RWA.

RWA density

The average RWA density for IRBA credit risk exposures is around 48.9% (30 June 2023: 46.0%), whereby the IRBA exposure classes "Central governments or central banks", "Institutions" and "Retail business" do not occur in pbb Group. Risk weights are a key component in determining the risk-weighted exposure amounts to be backed with own funds on a risk-oriented basis; RWA are calculated by multiplying the risk weight and the IRBA exposure value (EAD).

PD

The probability of default (PD) indicates the probability that a borrower/counterparty will not be able to service its loan in accordance with the contract over the course of a year (regardless of the amount of the receivable and the collateral provided). The PD for IRBA credit risk positions averages 7.1% (30 June 2023: 5.5%).

LGD

The loss given default (LGD) indicates the expected loss ratio that pbb Group will suffer in the event of a customer default. This is 23.2% on average for credit risk positions under the IRB approach (30 June 2023: 22.6%).

CCF

The undrawn IRBA loan commitments (before CCF) amount to a total of € 2,106 million (30 June 2023: € 2,075 million). The average CCF, which indicates how much of a free line is expected to be utilised within one year before a possible default, is 67% (30 June 2023: 68%).

The PD, LGD and CCF rating systems of pbb Group largely follow a through-the-cycle philosophy, although the structure of this philosophy may differ between the various models due to the risk factors taken into account in the model, among other things. Current default rates, loss ratios and CCF ratios may therefore deviate from the through-the-cycle forecasts depending on the status of the economic cycle.

Backtesting IRBA parameters

Table EU CR9 in accordance with Article 452 (h) CRR shows a comparison of the PD estimates and the actual default rate, broken down by IRBA exposure class. All IRBA models used in the pbb Group were taken as a basis.

A disclosure of table EU CR9.1 "IRB approach: PD back-testing per exposure class (only for PD estimates according to Article 180 (1) letter f CRR)" is not relevant for pbb Group. As of the disclosure date, pbb Group does not use so-called "shadow ratings" for its internal PD estimates of IRBA exposures, which replicate the credit ratings of external rating agencies or comparable institutions.

EU CR 9: IRB approach - PD back-testing per exposure class (defined PD scale)

a	b	c	d	e	f	g	h
A-IRB	**PD range 1)**	**Number of obligors at the end of previous year 2)**	**of which: number of obligors which defaulted in the year 3)**	**Observed average default rate (%) 4)**	**Exposures weighted average PD (%) 5)**	**Average PD (%) 6)**	**Average historical annual default rate (%) 7)**
Corporates - SMEs	0.00 to < 0.15	19	-	-	0.09	0.09	-
	0.00 to < 0.10	2	-	-	0.05	0.05	-
	0.10 to < 0.15	17	-	-	0.10	0.10	-
	0.15 to < 0.25	36	-	-	0.20	0.20	-
	0.25 to < 0.50	77	-	-	0.37	0.40	0.24
	0.50 to < 0.75	-	-	-	-	-	-
	0.75 to < 2.50	23	-	-	1.10	1.15	-
	0.75 to < 1.75	22	-	-	1.10	1.11	-
	1.75 to < 2.5	1	-	-	2.00	2.00	-
	2.50 to < 10.00	4	-	-	2.76	3.25	-
	2.5 to < 5	3	-	-	2.76	2.67	-
	5 to < 10	1	-	-	-	5.00	-
	10.00 to < 100.00	-	-	-	-	-	-
	10 to < 20	-	-	-	-	-	-
	20 to < 30	-	-	-	-	-	-
	30.00 to < 100.00	-	-	-	-	-	-
	100.00 (default)	3	-	-	100	100	-

All figures in € million, unless otherwise stated

a	b	c	d	e	f	g	h
A-IRB	**PD range 1)**	**Number of obligors at the end of previous year 2)**	**of which: number of obligors which defaulted in the year 3)**	**Observed average default rate (%) 4)**	**Exposures weighted average PD (%) 5)**	**Average PD (%) 6)**	**Average historical annual default rate (%) 7)**
Corporates - specialised lending	0.00 to < 0.15	3	-	-	0.10	0.10	-
	0.00 to < 0.10	-	-	-	-	-	-
	0.10 to < 0.15	3	-	-	0.10	0.10	-
	0.15 to < 0.25	21	-	-	0.20	0.20	0.49
	0.25 to < 0.50	126	2	1.59	0.39	0.40	0.89
	0.50 to < 0.75	-	-	-	-	-	-
	0.75 to < 2.50	150	4	2.67	1.39	1.36	1.47
	0.75 to < 1.75	124	3	2.42	1.23	1.23	1.33
	1.75 to < 2.5	26	1	3.85	2.00	2.00	1.97
	2.50 to < 10.00	138	11	7.97	4.63	4.21	3.76
	2.5 to < 5	84	7	8.33	3.05	3.16	3.93
	5 to < 10	54	4	7.41	6.29	5.85	3.30
	10.00 to < 100.00	6	-	-	12.73	14.08	5.71
	10 to < 20	5	-	-	11.66	11.50	6.67
	20 to < 30	1	-	-	27.00	27.00	-
	30.00 to < 100.00	-	-	-	-	-	-
	100.00 (default)	14	-	-	100	100	-

All figures in € million, unless otherwise stated

a	b	c	d	e	f	g	h
A-IRB	**PD range [1)]**	**Number of obligors at the end of previous year [2)]**	**of which: number of obligors which defaulted in the year 3)**	**Observed average default rate (%) [4)]**	**Exposures weighted average PD (%) [5)]**	**Average PD (%) [6)]**	**Average historical annual default rate (%) [7)]**
Corporates -others	0.00 to < 0.15	21	-	-	0.09	0.08	-
	0.00 to < 0.10	7	-	-	0.05	0.05	-
	0.10 to < 0.15	14	-	-	0.10	0.10	-
	0.15 to < 0.25	14	-	-	0.20	0.20	-
	0.25 to < 0.50	21	-	-	0.35	0.38	-
	0.50 to < 0.75	-	-	-	-	-	-
	0.75 to < 2.50	2	-	-	1.11	1.00	-
	0.75 to < 1.75	2	-	-	1.11	1.00	-
	1.75 to < 2.5	-	-	-	-	-	-
	2.50 to < 10.00	-	-	-	-	-	-
	2.5 to < 5	-	-	-	-	-	-
	5 to < 10	-	-	-	-	-	-
	10.00 to < 100.00	-	-	-	-	-	-
	10 to < 20	-	-	-	-	-	-
	20 to < 30	-	-	-	-	-	-
	30.00 to < 100.00	-	-	-	-	-	-
	100.00 (default)	2	-	-	100	100	-

[1)] PD ranges for the estimated probability of default (PD) of each debtor in this exposure class at the beginning of the disclosure period, without taking into account substitution effects due to credit risk mitigation techniques.

[2)] Number of debtors at the end of the previous year, i.e. at the beginning of the disclosure period.

[3)] Number of debtors that defaulted during the year (i.e. in the year prior to the disclosure date) in accordance with Article 178 CRR.

[4)] Arithmetic mean of the observed one-year default rate within the meaning of Article 4 (1) No. 78 CRR in relation to the non-defaulted debtors at the beginning of the one-year observation period.

[5)] Exposure value-weighted average probability of default (PD), weighted by the exposure at default (EAD) in accordance with EU CR6 (column e) at the beginning of the disclosure period.

[6)] Debtor-weighted average probability of default (PD), weighted by the number of debtors (EU CR9, column c) at the beginning of the disclosure period.

[7)] The simple average of the annual default rates over the last five years.

There were 17 defaults in the 2023 financial year. This does not include one new debtor whose financing was not yet in place at the end of 2022. There were 10 defaults by customers for whom a free line existed one year before default, which was taken into account with a credit conversion factor (CCF) of 50%. On average, a CCF of 13.4% was realised. The average historical default rate may deviate from the forecast average PD due to the low number of units in some cases (particularly with regard to defaults in recent years) and the calibration of the rating models to long-term average default rates. No observations are allocated to the PD range 0.50 to 0.75 due to the standardised PD master scale used by pbb Group. The IRBA risk exposure classes central governments or central banks, institutions and retail business do not occur in pbb Group.

Counterparty credit risk

This chapter shows the information on pbb Group's counterparty credit risk resulting from derivatives and securities financing transactions (securities lending/repo transactions) in accordance with Article 439 CRR and additionally Articles 438 (h), 444 (e) and 452 (g) CRR.

Counterparty credit risk (CCR) refers to the risk of counterparty default in the context of a derivative or securities financing transaction before the final settlement of the payments associated with this transaction.

Objectives and counterparties

Derivatives

Derivatives are primarily used at pbb Group to hedge market risks resulting from changes in interest rates and exchange rates, for example. These hedging transactions are matched by underlying transactions of asset or liability items. In this respect, the hedging of interest rate and currency risks is aimed at reducing or avoiding market risks. The counterparties in the derivatives business are primarily OECD credit institutions or Eurex Clearing. In addition, pbb Group provides derivatives for property and public-sector clients in order to be able to specifically hedge the market risks of commercial property financing, for example.

Securities financing transactions

The use of securities lending/repo transactions serves the purpose of short-term liquidity management and is also a key source of collateralised refinancing for pbb. The counterparties are primarily OECD credit institutions or Eurex Repo.

Qualified central counterparty

pbb is a direct clearing member of Eurex Clearing. Eurex Clearing is the central clearing house used by pbb or the qualified central counterparty (qualified CCP) in accordance with Article 4 (88) CRR. This enables pbb Group to use a central counterparty for certain types of contracts, thereby reducing bilateral default risk.

Procedure for capital adequacy

Derivatives

For the calculation of own funds requirements for counterparty credit risk in accordance with Part 3, Title II, Chapter 6 of the CRR (i.e. for derivative transactions), pbb Group applies the standardised approach (SA-CCR) in accordance with Articles 274 et seq. CRR. The Bank's own internal models (IMM) are not currently used.

For the calculation of the additional own funds requirement for OTC derivatives for the risk of a credit valuation adjustment (CVA risk) in accordance with Part 3, Title VI of the CRR, pbb Group uses the standardised method in accordance with Article 384 CRR.

Securities financing transactions

For securities financing transactions (securities lending/repo transactions), pbb Group applies the provisions for credit risk mitigation in accordance with chapter 4 of the CRR, the comprehensive method for taking financial collateral into account in accordance with articles 223 et seq. CRR.

Qualified central counterparty

pbb Group uses the risk-sensitive method in accordance with Article 308 CRR to calculate the own funds requirements for contributions to the default fund of a qualified central counterparty.

Quantitative information on counterparty credit risk

The following tables EU CCR1 to EU CCR5 and EU CCR8 show the counterparty credit risk exposures of pbb Group as of the disclosure date 31 December 2023.

The table EU CCR6 "Exposures to credit derivatives" in accordance with Article 439 (j) CRR is not relevant for the pbb Group. The pbb Group has not entered into any hedging transactions with credit derivatives (purchased or sold credit protection), neither as a protection buyer nor as a protection seller.

Similarly, the table EU CCR7 "RWA flow statement of CCR risk positions according to the IMM" pursuant to Article 438 (h) CRR is not relevant for pbb Group. pbb Group does not use an internal model-based method (IMM) for counterparty credit risk.

Counterparty credit risk positions

The risk exposure values based on the exposure at default (EAD) for the counterparty credit risk - excluding initial margin payments and contributions to the default fund - amount to € 862 million (30 June 2023: € 584 million), of which € 315 million (30 June 2023: € 53 million) is attributable to receivables from the central counterparty Eurex Clearing.

In the second half of 2023, securities financing transactions (repo and reverse repo transactions) processed via Eurex Clearing in particular led to an increase in EAD (€ +269 million compared to 30 June 2023), whereas the EAD of derivative transactions increased only slightly (€ +9 million compared to 30 June 2023).

Of the total of € 862 million, € 805 million is attributable to risk positions which are treated in accordance with the standardised approach (CRSA) and € 57 million to risk positions for which pbb Group calculates the RWA in accordance with the advanced IRB approach (IRBA) based on internal bank rating procedures. Under the standardised approach, the exposure values to Eurex Clearing are reported (exposure class "Institutions").

The exposure at default (EAD) for the CVA risk amounts to € 168 million (30 June 2023: € 202 million). The CVA charge is the additional capital requirement for the risk of a credit valuation adjustment (CVA risk) for OTC derivatives, i.e. for potential (unexpected) market value losses in connection with a deterioration in the creditworthiness of a counterparty. Transactions with Eurex Clearing are not included in the capital requirement for CVA risk.

The risk positions for contributions to the default fund (default fund contribution) of Eurex Clearing amount to € 20 million (30 June 2023: € 7 million). The default fund serves to cover losses that may arise from the default of one or more clearing members and that exceed the losses covered by the initial margin.

Table EU CCR1 shows the counterparty credit risk according to the method used in accordance with Article 439 letters f, g, k and m CRR. Exposures to central counterparties are not included; these are shown separately in the following table EU CCR8.

EU CCR1: Analysis of the CCR risk position by approach

		a	b	c	d	e	f	g	h
All figures in € million, unless otherwise stated		**Replacement cost (RC)** [4]	**Potential future exposure (PFE)** [5]	**EEPE** [6]	**Alpha used for computing regulatory exposure value**	**Exposure value pre-CRM** [7]	**Exposure value post-CRM** [8]	**Exposure value** [9]	**RWA** [10]
EU-1	EU - Original Exposure Method (for derivatives)	-	-	---	1.4	-	-	-	-
EU-2	EU - Simplified SA-CCR (for derivatives)	-	-	---	1.4	-	-	-	-
1	SA-CCR (for derivatives) [1] [2]	443	252	---	1.4	764	229	226	154
2	IMM (for derivatives and SFTs)	---	---	-	-	-	-	-	-
2a	of which: securities financing transactions netting sets	---	---	-	---	-	-	-	-
2b	of which: derivatives and long settlement transactions netting sets	---	---	-	---	-	-	-	-
2c	thereof: from contractual cross-product netting sets	---	---	-	---	-	-	-	-
3	Financial collateral simple method (for SFTs)	---	---	---	---	-	-	-	-
4	Financial collateral comprehensive method (for SFTs) [3]	---	---	---	---	322	322	322	78
5	VaR for SFTs	---	---	---	---	-	-	-	-
6	**Total**	---	---	---	---	**1,085**	**550**	**547**	**232**

[1] Table EU CCR1 does not contain any exposures to central counterparties (CCPs).
[2] pbb measures the exposure value for the counterparty credit risk of derivative transactions using the standardised approach (SA-CCR) in accordance with part 3, chapter 6, section 3 of the CRR.
[3] For securities financing transactions (securities lending/repo transactions), pbb applies the provisions for credit risk mitigation in accordance with part 3, chapter 4 of the CRR, the comprehensive method in accordance with article 223 et seq. CRR.
[4] Replacement cost (RC), taking into account the collateral received/provided, calculated in accordance with Article 275 CRR.
[5] Potential future exposure (PFE) calculated in accordance with Article 278 CRR.
[6] Effective expected positive exposure (effective EPE) in accordance with Article 272 (22) CRR using the internal model method (IMM).
[7] Derivatives (line 1): Risk position value after netting, but before credit risk mitigation (collateral received) and without taking into account CVA (credit value adjustments) losses recognised in the income statement.
SFTs (line 4): Exposure value (cash or securities amount) before netting and before credit risk mitigation.
[8] Derivatives (line 1): Exposure value after netting and after credit risk mitigation (collateral received), but excluding CVA losses recognised in the income statement.
SFTs (row 4): Exposure at default (EAD) after netting and after credit risk mitigation.
[9] Exposure at default (EAD), the relevant amount (this receives the risk weight of the counterparty) for the calculation of the risk-weighted exposure amounts (column h).
The EAD of a netting set is calculated as follows: EAD = 1.4 x (RC + PFE).
Derivatives (row 1): Exposure value after netting and after credit risk mitigation (collateral received) and after taking into account CVA losses recognised in the income statement.
SFTs (row 4): Exposure value
after netting and after credit risk mitigation.
[10] Risk-weighted assets (RWA) for determining capital requirements in accordance with the standardised or IRB approach to credit risk.

Table EU CCR8 shows the exposures to central counterparties in accordance with Article 439 (i) CRR. The qualified central counterparty (qualified CCP) used by pbb is Eurex Clearing.

EU CCR8: Exposures to central counterparties (CCPs)

		a	b
All figures in € million, unless otherwise stated		Exposure value [1]	RWA [2]
1	**Exposures to QCCPs (total)**	**---**	**12**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); thereof	315	6
3	(i) OTC derivatives	16	0.3
4	(ii) Exchange-traded derivatives	-	-
5	(iii) SFTs	299	6
6	(iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin [3]	-	---
8	Non-segregated initial margin [4]	-	-
9	Prefunded default fund contributions	-	-
10	Unfunded default fund contributions	20	6
19	Prefunded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

[1] Exposure at default (EAD), excluding exposures to non-CCPs (CCP: central counterparty).
[2] Risk-weighted exposure amount (risk-weighted assets, RWA), excluding risk exposures to non-CCPs.
[3] Collateral that is held extrajudicially and protected against insolvency within the meaning of Article 300 (1) CRR.
[4] Collateral that is not held extrajudicially and protected against insolvency within the meaning of Article 300 (1) CRR.

Table EU CCR2 shows the own funds requirements for CVA risks in accordance with the method used pursuant to Article 439 letter h CRR. No CVA charge is calculated for exposures to the central counterparty Eurex Clearing in accordance with Article 382 CRR.

EU CCR2: Capital requirements for CVA risk

		a	b
All figures in € million, unless otherwise stated		**Exposure value [2)]**	**RWEA**
1	Total transactions subject to the Advanced method	-	-
2	(i) VaR component (including the 3× multiplier)	---	-
3	(ii) stressed VaR component (including the 3× multiplier)	---	-
4	Transactions subject to the Standardised method [1)]	168	119
EU-4	Transactions subject to the Alternative approach (Based on the Original Exposure Method)	-	-
5	**Total transactions subject to own funds requirements for CVA risk**	**168**	**119**

[1)] pbb uses the standardised approach in accordance with Article 384 CRR to determine the own funds requirements for the risk of a credit valuation adjustment (CVA risk) for OTC derivatives.
Transactions with Eurex Clearing, the central counterparty (CCP) used by pbb, are not included in the own funds requirement for the CVA risk.
[2)] Exposure at default (EAD), relevant amount (this receives the risk weight of the counterparty) for the calculation of the risk-weighted exposure amounts (column b).

Table EU CCR3 shows the counterparty credit risk under the standardised approach by exposure class and risk weight in accordance with Articles 439 (l) and 444 (e) CRR. The Standardised Approach includes the exposure values to Eurex Clearing (exposure class "Institutions").

EU CCR3: Standardised approach - CCR exposures by regulatory exposure class and risk weight

		a	b	c	d	e	f	g	h	i	j	k	l
	Exposure classes	**Risk weight**											**Total exposure value [1)]**
All figures in € million, unless otherwise stated		**0%**	**2%**	**4%**	**10%**	**20%**	**50%**	**70%**	**75%**	**100%**	**150%**	**Others**	
1	Central governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-
2	Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
3	Public sector entities	1	-	-	-	-	-	-	-	-	-	-	1
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-
5	International organisations	-	-	-	-	-	-	-	-	-	-	-	-
6	Institutions	-	315	-	-	293	196	-	-	-	-	-	804
7	Corporates	-	-	-	-	-	-	-	-	-	-	-	-
8	Retail	-	-	-	-	-	-	-	-	-	-	-	-
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
10	Other items	-	-	-	-	-	-	-	-	-	-	-	-
11	**Total exposure value**	**1**	**315**	**0**	**0**	**293**	**196**	**0**	**0**	**0**	**0**	**0**	**805**

[1)] Exposure at Default (EAD), including the transactions settled with Eurex Clearing, according to the COREP reporting of own funds and own funds requirements.

Table EU CCR4 shows the counterparty credit risk under the IRB approach by exposure class and PD scale in accordance with Articles 439 (l) and 452 (g) CRR. The IRBA exposure classes central governments and central banks, institutions and retail business are not assigned any counterparty credit risk exposures as at the disclosure date, which is why the EU CCR4 table is only shown for the "Corporates" exposure class.

EU CCR4: IRB approach - CCR exposures by exposure class and PD scale

			a	b	c	d	e	f	g
All figures in € million, unless otherwise stated	Exposure class	PD scale [1]	Exposure value [2]	Exposure weighted average PD (%) [3]	Number of obligors	Exposure weighted average LGD (%) [4]	Exposure weighted average maturity (years)	RWA [5]	Density of risk weighted exposure amounts (%) [6]
1	**Corporates - Specialised Lending**	0.00 to <0.15	2.61359	0.10	1	56.01	5	1.13272	43.34
2		0.15 to <0.25	0.4	0.20	4	56.01	4	0.2	62.03
3		0.25 to <0.50	1	0.37	10	56.01	3	1	85.72
4		0.50 to <0.75	-	-	-	-	-	-	-
5		0.75 to <2.50	33	1.45	48	56.01	4	46	137.60
6		2.50 to <10.00	17	3.03	17	56.01	4	23	137.80
7		10.00 to <100.00	-	-	-	-	-	-	-
8		100.00 (Default)	-	-	-	-	-	-	-
	Sub-total		**54**	**1.88**	**81**	**56.01**	**4**	**72**	**131.75**
1	**Corporates - Specialised Lending**	0.00 to <0.15	0.4	0.05	2	56.01	4	0.2	37.34
2		0.15 to <0.25	0.4	0.20	2	56.01	5	0.4	85.77
3		0.25 to <0.50	-	-	-	-	-	-	-
4		0.50 to <0.75	-	-	-	-	-	-	-
5		0.75 to <2.50	2	1.44	7	56.01	5	3	171.98
6		2.50 to <10.00	-	-	-	-	-	-	-
7		10.00 to <100.00	-	-	-	-	-	-	-
8		100.00 (Default)	-	-	-	-	-	-	-
	Sub-total		**3**	**1.01**	**11**	**56.01**	**5**	**3**	**135.80**
Total (all CCR-relevant risk position classes) [7]			**57**	**1.84**	**92**	**56.01**	**4**	**75**	**131.93**

[1] PD ranges for the estimated probability of default (PD) without taking into account substitution effects due to credit risk mitigation techniques.
[2] Exposure at Default (EAD).
[3] Exposure-weighted average probability of default (PD), weighted by the exposure value in accordance with column (a).
[4] Exposure-weighted average loss given default (LGD), weighted by the exposure value as per column (a).
[5] Risk-weighted exposure amounts (risk-weighted assets, RWA).
[6] RWA density (%): Calculated by dividing the RWA (column f) by the respective EAD (column a).
[7] No CCR exposures are allocated to the IRBA exposure classes central governments and central banks, institutions and retail business as at the disclosure date, which is why no breakdown of these exposure classes is provided.

Table EU CCR5 shows the collateral received and provided for counterparty credit risk, separately for derivatives and securities financing transactions, in accordance with Article 439 letter e CRR. Further information on the collateral used is described in the section "Mitigation of counterparty credit risk and collateralisation".

EU CCR5: Composition of collateral for CCR risk positions

		a	b	c	d	e	f	g	h
		Collateral used in derivative transactions				**Collateral used in SFTs**			
	Collateral type	**Fair value of collateral received**		**Fair value of posted collateral**		**Fair value of collateral received**		**Fair value of posted collateral**	
All figures in € million		**Segregated [1)]**	**Unsegregated [2)]**	**Segregated [1)]**	**Unsegregated [2)]**	**Segregated [1)]**	**Unsegregated [2)]**	**Segregated [1)]**	**Unsegregated [2)]**
1	Cash - domestic currency	-	280	-	1,185	-	24	-	-
2	Cash - other currencies	-	61	-	-	-	-	-	-
3	Domestic sovereign debt	-	-	-	-	-	-	-	-
4	Other sovereign debt	-	-	-	-	-	644	-	-
5	Government agency debt	-	-	-	-	-	-	-	-
6	Corporate bonds	-	-	-	-	-	-	-	-
7	Equity securities	-	-	-	-	-	-	-	-
8	Other collateral	-	-	-	-	-	1,765	-	-
9	**Total**	**0**	**342**	**0**	**1,185**	**0**	**2,433**	**0**	**0**

[1)] Collateral that is held extrajudicially and protected from insolvency within the meaning of Article 300 (1) CRR.
[2)] Collateral that is not held extrajudicially and protected against insolvency within the meaning of Article 300 (1) CRR.

Internal capital allocation and upper limits for counterparty credit risk positions

The capital allocation and limitation for default risks vis-à-vis counterparties (including the central clearing house Eurex Clearing used by pbb) is embedded in the generally applicable allocation and limitation process for credit risks in pbb Group. There is no separate capital allocation and limitation for default risks within the scope of derivative or securities financing transactions in pbb Group. The allocation of limits is primarily based on the creditworthiness of the counterparties, for which the rating procedures used play a key role. For details on capital allocation to risk types, please refer to the chapter on ICAAP and monitoring risk-bearing capacity (see chapter "Economic capital and risk-bearing capacity (ICAAP)"). In all other respects, the methods of regulatory large exposure management apply. Risk Management & Control (RMC) continuously monitors the utilisation of counterparty limits on a daily basis.

Correlation risk

The requirement according to article 439 letter c CRR regarding a description of the rules with regard to correlation risks is not relevant for pbb Group. pbb Group does not trade any products whose underlying directly correlates with the probability of default of the counterparty.

Mitigation of counterparty credit risk and collateralisation

In accordance with Article 439 (b) CRR, the following explanations describe the measures for mitigating counterparty credit risk and the rules for collateralisation. The pbb Group applies the regulatory requirements for off-balance sheet netting for derivative financial instruments as well as for securities lending/repo transactions, provided that the contractual agreements fulfil the requirements for risk-mitigating recognition in accordance with Article 296 CRR or Article 206 CRR. In this context, pbb Group uses the standard market framework agreements including the respective collateral agreements.

Netting agreements

Business with both derivatives and securities lending/repo transactions is usually concluded by means of standardised bilateral netting agreements, which serve to minimise the legal risk as well as the economic and regulatory credit risk and enable the offsetting of mutual risks (netting). This allows the positive and negative market values of all contracts included under a netting agreement to be offset against each other and the regulatory future risk premiums of these products to be reduced. As part of the netting process, the credit risk is reduced to a single net claim against the contractual partner. pbb Group does not apply cross-product netting (derivatives versus securities financing transactions).

Both for regulatory reporting and for the internal measurement and monitoring of credit exposures, such risk-reducing techniques are only used if they are considered enforceable in the respective jurisdiction in the event of the business partner's insolvency. Legal opinions are used to check the validity and enforceability.

The national and international agreements used for derivatives and securities lending/repo transactions are the German Master Agreement for Financial Derivatives Transactions (DRV) under German law and the ISDA Master Agreement of the International Swaps and Derivatives Association (ISDA) as well as the Global Master Repurchase Agreement (GMRA), the German Master Agreement for Securities Repurchase Transactions (DRV), the Master Agreement for Financial Transactions/European Master Agreement (EMA), the German Master Agreement for Securities Lending (DRV) and the Global Master Securities Lending Agreement (GMSLA).

pbb is a direct clearing member of Eurex Clearing. Eurex Clearing is the central clearing house used by pbb or the qualified central counterparty (qualified CCP) in accordance with Article 4 (88) CRR. This enables pbb Group to use a central counterparty for certain types of contracts, thereby reducing bilateral default risk.

Collateral agreements

In addition to the netting agreements, pbb Group also enters into standard market collateral agreements (German collateralisation annex to the DRV or ISDA Collateral Support Annex) with certain business partners in order to hedge the net receivable/liability resulting after netting (receipt or provision of collateral). The collateral agreements limit the credit risk through prompt valuation and adjustment of the customer exposure (limit relief) and thus create scope for new business transactions within the counterparty lines granted.

Financial collateral, primarily cash collateral but also securities in some cases, is accepted as collateral for derivatives and securities lending/repo transactions. Collateral is generally provided by way of full title transfer, and in the case of securities also by pledging. As a rule, pbb provides or receives cash collateral in EUR. The collateral received is documented in the system. The validity and enforceability of the collateral is also verified on the basis of legal opinions.

The current collateral requirement is determined daily as part of mark-to-market valuations and agreed with the counterparties. If threshold amounts have been agreed, collateral is only requested when the threshold amount applicable to the respective counterparty is reached. If minimum transfer amounts have been agreed, the same applies as for the exemption amounts. A payment request (call) is only made when the respective minimum transfer amount is reached or exceeded. In the event of changes in the mark-to-market valuation below this limit, no payment request is made in order to minimise settlement costs. Incoming payments are monitored and a reminder is sent to the counterparty if necessary.

A collateral agreement also exists for the central counterparty Eurex Clearing. The collateral for both derivatives and securities lending/repo transactions consists primarily of securities that have been provided specifically for Eurex Clearing in a securities portfolio. However, cash collateral is also possible.

Rating-dependent collateral agreements

As of the disclosure date, pbb Group had not concluded any rating-dependent collateral agreements (collateral service agreements, CSAs) with any counterparty which provide for a reduction in the minimum transfer amount in the event of a rating downgrade. In general, the scope of the adjustment is regulated with the contractual partner in the collateral agreement. The collateral agreements also do not currently provide for threshold amounts, according to which pbb would have to make a correspondingly larger collateral contribution in the event of an adjustment of the threshold amount.

In the event of a change in the minimum transfer amount, the payment flows are postponed and no additional payments are made. This is due to the fact that, unlike the exemption amount, the minimum transfer amount does not represent an additional security, but instead regulates the amount from which payments must be made. If the minimum transfer amount is reduced, payments must be made from a lower threshold, but this has no influence on the security contribution, only on the order of magnitude from which value changes in the CSA portfolio are compensated. If the minimum transfer amount is lower, changes in value are therefore equalised earlier.

The non-rating-dependent minimum transfer amounts agreed in the collateral agreements amounted to € 16 million as at 31 December 2023 (31 December 2022: € 17 million).

The following table shows the senior unsecured ratings mandated by pbb as of the disclosure date.

Senior Unsecured Ratings (EU CCRA)

Deutsche Pfandbriefbank AG		Standard & Poor's
	Long-term issuer rating / outlook	BBB / Negative
	Short-term issuer rating	A-2
	Long-term "preferred" senior unsecured debt rating [1]	BBB
	Long-term "non-preferred" senior unsecured debt rating [2]	BB+

[1] "Senior Unsecured Debt".
[2] "Senior Subordinated Debt".

The rating agencies may change or withdraw ratings at any time. The rating of an individual security issued by pbb may differ from the ratings listed above or may not be rated at all. The applicable criteria and explanations of the rating agencies should be used for the evaluation and utilisation of the ratings, and the terms of use must be observed. Ratings should not be used as a substitute for your own analyses. They do not constitute a recommendation to buy, sell or hold securities of pbb.

Creation of credit reserves

In accordance with Article 439 letter b CRR, the following explanations describe the regulations on the formation of credit reserves (credit risk provisions) for derivatives and securities financing transactions (securities lending/repo transactions).

Derivatives

According to IFRS 9, derivatives must be measured at fair value through profit or loss unless they are used as hedging instruments in cash flow hedge accounting. For those financial assets that are subsequently measured at fair value through profit or loss, a value adjustment is implied in the fair value. This means that value adjustments due to a counterparty credit risk are directly reflected in the calculation of the fair value. The maximum default risk for derivative assets recognised at fair value through profit or loss is reflected in the fair value.

The positive/negative market values of the stand-alone derivatives are recognised in the balance sheet under "Financial assets at fair value through profit or loss" or "Financial liabilities at fair value through profit or loss". Changes in fair value within a period are recognised in the income statement under "Result from financial instruments at fair value through profit or loss" (fair value measurement result).

The positive/negative market values of hedging derivatives are recognised under the balance sheet items "Positive fair values of hedging derivatives" and "Negative fair values of hedging derivatives". Hedging derivatives include the fair values of derivatives which are used as hedging relationships in hedge accounting. As pbb Group no longer designates any derivatives in cash flow hedge accounting, only derivatives of micro fair value hedge accounting or portfolio hedges for hedging interest rate risks and, to a minor extent, currency risks are included. These are measured at fair value. Changes in fair value within a period are recognised in the income statement under "Result from hedging relationships".

CVA and DVA

pbb Group recognises credit value adjustments (CVA) and debt value adjustments (DVA) for OTC derivatives in order to take into account the expected default risk of a counterparty; these are valuation adjustments when measuring OTC derivatives for accounting purposes. CVA refers to valuation adjustments for the counterparty's default risk (deterioration in creditworthiness) and DVA refers to adjustments for the counterparty's own default risk (deterioration in creditworthiness). CVA losses are recognised in the income statement and taken into account when determining the risk position value. The DVA adjustments are deducted from common equity tier 1 capital.

CVA charge

To determine the additional own funds requirement for OTC derivatives for the risk of a credit valuation adjustment (CVA risk) in accordance with Part 3, Title VI of the CRR, i.e. for potential market value losses in connection with a deterioration in the creditworthiness of the counterparty, pbb Group uses the standardised method in accordance with Article 384 CRR.

Securities financing transactions

For securities financing transactions (securities lending/repo transactions), the general provisions and regulations on credit risk adjustments and impairment under IFRS 9 described in the "Credit risk" section of the chapter "Credit risk adjustments" apply. These regulations are relevant for financial assets measured "at amortised cost" or "at fair value through other comprehensive income", among other things.

Securitisations

As of the disclosure date 31 December 2023, pbb Group still has no exposures from securitisations in its portfolio. The information and tables pursuant to Article 449 CRR in conjunction with EU SEC1 to EU SEC5 are therefore not to be disclosed for pbb Group.

No new securitisations of own receivables are planned for the 2024 financial year. The business strategy of pbb Group does not currently provide for new securitisations.

Market risk

This chapter shows the risk management objectives and the risk management policy for market risk (including interest rate risk in the banking book) of pbb Group in accordance with Article 435 (1) CRR, as well as the information on determining the own funds requirements in accordance with Article 445 CRR and on interest rate risk in the banking book in accordance with Article 448 CRR. However, disclosure in accordance with Article 455 CRR "Use of internal models for market risk" is not relevant for pbb Group. The pbb Group currently does not use its own internal models (IMA) for calculating own funds requirements, but the standardised approach in accordance with Articles 325 et seq. CRR.

Management of market risk

Definition

Market risk describes the risk of a loss in market value or a negative change in periodic net interest income due to fluctuations in the market prices of financial instruments. Transactions of pbb Group are mainly exposed to the following types of market risk:

- General interest rate risk (risk due to changes in general market interest rates)
- Basis risk (risk due to changes in tenor basis spreads or cross-currency basis spreads)
- Volatility risk (risk due to changes in implied volatilities)
- Credit spread risk (risk due to changes in credit spreads)
- Foreign currency risk (risk due to changes in foreign exchange rates)
- Concentration risk (risk of additional losses due to one-sided portfolio composition).

Risk strategy

pbb pursues the following fundamental principles with regard to market risks from a present value and periodic perspective:

- Only transactions in financial instruments that have successfully passed through the new product process and for which market values can be observed or determined using a model may be concluded.

- All positions entered into are subject to daily sensitivity, value-at-risk and performance monitoring independent of trading.

- Interest rate risk in the banking book (IRRBB) is identified, measured, managed and monitored both from a present value perspective and in relation to the periodic result. The present value perspective serves as the primary approach for operational interest rate risk management, which is supplemented by monitoring the interest rate risks of the periodic interest result on a quarterly basis. In addition, credit spread risks in the banking book (CSRBB) are also included in regular risk measurement, risk management and monitoring.

Organisation

The present value monitoring of positions with regard to market risks is carried out by the Risk Management & Control (RMC) division, which is organisationally separate from the Trading division up to the management level, while the periodic interest rate risk is monitored by the Finance division.

Risk reporting

RMC prepares detailed daily market risk reports for management and operational control. The daily market risk report is addressed in particular to the Management Board and contains, among other things

> Market risk value-at-risk (VaR) and utilisation of VaR limits for the total market risk CSRBB and IRRBB (as well as its components general interest rate risk, basis risk and option/volatility risk),
> sensitivities of the market risk factors at different levels of detail as well as the monitoring of sensitivity triggers and
> a presentation of the economic performance measurement and the decomposition of economic performance according to individual risk factors.

To monitor the periodic interest rate risk, the changes in the effects recognised in profit or loss and in accumulated other comprehensive income (equity) are reported on a quarterly basis using predefined interest rate scenarios and a dynamic balance sheet

Risk quantification - market risk measurement and market risk limitation

Market risk value-at-risk

RMC calculates the market risk VaR at overall and sub-portfolio level on a daily basis using a historical simulation model. All positions that are subject to market risks are included in the VaR calculation. As at the disclosure date, the key parameters of the market risk VaR model can be summarised as follows:

> The simulation model is based on a market data history of one year, which is equally weighted in the simulation.
> The individual market risk types are aggregated into an overall VaR, which forms the basis for limit monitoring.
> For daily operational risk management, the market risk VaR is based on a 1-day holding period and a 99% confidence interval.

At the end of December 2023, the market risk VaR, taking into account diversification effects between the individual market risk types, amounted to € 22 million (year-end 2022: € 30 million). The decline in the market risk VaR is mainly due to lower interest rate and credit spread volatilities over the course of 2023. The VaR limit for the overall market risk amounted to € 50 million throughout 2023 (year-end 2022: € 60 million).

The VaR limit was not exceeded during the disclosure period.

Interest rate risk in the banking book (IRRBB)

The consolidated IRRBB VaR for all risk categories of interest rate risk in the banking book (general interest rate risk, tenor basis spread risk, cross-currency basis spread risk, option risk and volatility risk) totalled € 19 million at the end of 2023, while the CSRBB VaR amounted to € 8 million. In addition to limiting the market risk VaR, daily limit monitoring is carried out for the IRRBB VaR (limit at the end of December 2023: € 30 million) and the CSRBB VaR (limit at the end of December 2023: € 40 million).

Credit spread risk in the banking book (CSRBB)

The majority of the credit spread risk is attributable to assets eligible as cover for Pfandbriefe. Risk measurement systems for determining credit spread risks exist for all relevant positions. All credit spread risks of active instruments that are measured at fair value through profit or loss (FVPL) or at fair value through other comprehensive income (FVOCI) are subject to VaR limits. In addition, there are the credit spread risks of asset-side securities, which are measured at amortised cost.

CSRBB in accordance with EBA Guideline EBA/GL/2022/14

In accordance with the guidelines on the management of interest rate risk and credit spread risk in banking book transactions (EBA/GL/2022/14), which came into force on 31 December 2023, pbb has extended the scope of financial instruments involving credit spread risks to all transactions whose pricing depends on credit spreads observable on the market. This extends the scope of transactions in the CSRBB to almost all of pbb's assets and liabilities. In addition, pbb calculates the CSRBB VaR in accordance with the guideline using risk factors which are defined without idiosyncratic components. These changes resulted in a CSRBB VaR of € 69 million (limit: € 120 million) and a market risk VaR of € 63 million (limit: € 120 million) as at the end of December 2023.

Other instruments such as sensitivity analyses and stress tests supplement the VaR analysis.

Sensitivity analyses

Overnight yield curves are used for the valuation relevant for determining sensitivity. Sensitivity analyses are used to quantify the effect that a change in individual market parameters has on the value of the positions. For example, credit spread sensitivity provides information on the change in economic present value resulting from an isolated increase of one basis point in the credit spreads relevant to the valuation.

Stress tests

While the VaR measurement reflects the market risk under "normal" market conditions and is not to be understood as a measure of a potential maximum loss, internal economic stress scenarios show the market risk under more difficult or even extreme economic conditions. At pbb Group, hypothetical and historical stress scenarios are calculated on a monthly and quarterly basis for material risk drivers. The effects of severe to extreme changes in market data and assumptions regarding customer behaviour on the economic present value are determined.

In addition to the internal economic stress scenarios, external regulatory stress scenarios of the supervisory standard test and the early warning indicator are calculated and analysed.

The Management Board and the relevant committees are regularly informed of the results of the stress scenarios. In addition, as part of the management of interest rate risk in the banking book (including credit spread risks), changes in the present value of selected internal and external stress scenarios are monitored using specific limits or triggers.

Backtesting

The quality of the risk measurement methods used is continuously monitored by comparing the one-day VaR with the actual daily changes in the present value of the portfolio. The traffic light system of the Basel Capital Accord is used to assess the quality of the risk model. This involves counting the backtesting outliers within a period of 250 trading days. In the 250 trading days up to the end of 2023, one outlier was observed, which occurred primarily due to relatively large increases in EUR swap rates in July 2023. The risk model therefore has a green traffic light colour in accordance with the traffic light system of the Basel Capital Accord.

Periodic interest rate risks

pbb uses a dynamic model to measure and monitor periodic interest rate risks (dynamic earnings). This simulates changes in future income statements and balance sheet developments which would result from planned balance sheet developments and given interest rate scenarios. Periodic interest rate risks are measured and monitored at the end of each quarter with a simulation horizon of the following four quarters. Negative deviations from the base value were monitored with a trigger of € 60 million for the effects recognised in profit or loss and with a trigger of € 100 million for the effects in accumulated other comprehensive income (equity). Neither trigger was exceeded in the reporting period.

Economic market risk capital

Details on the calculation of economic capital from market risks and the quantification of economic capital from market risks are described in the section "Economic capital and risk-bearing capacity (ICAAP)".

Recognition of economic hedging relationships as hedge accounting relationships

Hedge accounting refers to the special IFRS accounting regulations for hedging relationships, the aim of which is the largely offsetting recognition of changes in the value of the hedged underlying transactions and hedging instruments. The IFRS requirements must be met for hedge accounting to be recognised. These requirements, such as the requirements for the effectiveness of a hedging relationship, do not always match the methods used in bank management. As a result, there may be differences between the economic hedging relationships and those recognised in the balance sheet.

Risk management, monitoring and minimisation

pbb Group manages and monitors market risk using a three-pillar approach:

- Management of positions in the Treasury division
- Trade-independent risk measurement and monitoring of trigger and limit compliance
- Escalation processes across all decision-making bodies up to the Management Board.

Financial derivatives are mainly used for hedging purposes.

General interest rate risk

The general interest rate risk or gap risk amounted to € 16 million as at the end of December 2023. The reduction compared to the comparative figure of € 21 million at the end of 2022 is primarily due to the lower interest rate volatilities described in the "Market risk value-at-risk" section above.

Basic risks

Basis risks are defined as tenor basis spread and cross-currency basis spread risks. As at the reporting date, tenor basis spread risks totalling € 3 million and cross-currency basis spread risks totalling € 2 million were reported (previous year's figures: € 3 million tenor basis spread risk and € 2 million cross-currency basis spread risk).

Volatility risks

Volatility risks amounted to € 1 million as at the end of December 2023 (year-end 2022: € 1 million).

Opportunities

As shown, the sensitivities result in a VaR, i.e. a possible future (economic) loss, in the event of an unfavourable market trend. The same sensitivities can also lead to economic gains in the event of a favourable market development. For example, high credit spread sensitivities on the assets side represent a risk as described above. In the event of a reduction in the relevant credit spreads, these credit spread sensitivities result in economic gains, which in turn represents an opportunity.

From an economic perspective, open interest rate risk positions can prove to be a neutral or even earnings-enhancing component in the periodic interest rate risk, for example fixed-interest loans with medium or long maturities.

Capital requirement for market risk

Market risks must be backed by own funds in accordance with part 3, title IV of the CRR. pbb Group still does not maintain a trading book for securities and derivatives portfolios with the intention of generating short-term profits. In this respect, the transactions of pbb Group are exclusively subject to the own funds requirements for the foreign currency risk of the banking book (the risk arising from changes in foreign exchange rates), as shown in the following table EU MR1 in accordance with Article 445 CRR. For the calculation of own funds requirements for market risks, pbb Group uses the standardised approach in accordance with Articles 325 et seq. CRR.

Own internal models (IMA) in accordance with Articles 362 et seq. CRR for the calculation of own funds requirements are currently not used by pbb Group. In this respect, the tables EU MRB, EU MR2-A / EU MR2-B, EU MR3 and EU MR4 pursuant to Articles 455 and 438 (h) CRR are not relevant for pbb Group.

Quantitative information on market risk

Table EU MR1 in accordance with Article 445 CRR shows the own funds requirements and the risk-weighted exposure amounts (RWA) for the market risk of pbb Group.

RWA amounted to € 52 million as at the disclosure date (30 June 2023: € 14 million). The increase in RWA in the second half of 2023 is primarily due to the increase in risk provisions in US dollars (USD) for property financing in the USA as well as changes in credit spreads and interest rates for the USD, pound sterling (GBP) and Swedish krona (SEK). The capital backing for market risks amounted to € 4 million as at the disclosure date (30 June 2023: € 1 million).

EU MR1: Market risk under the standardised approach

		a	a
All figures in € million		**Risk-weighted assets (RWA)**	**Minimum capital requirement**
	Outright products		
1	Interest rate risk (general and specific)	-	-
2	Equity risk (general and specific)	-	-
3	Foreign exchange risk	52	4
4	Commodity risk	-	-
	Options		
5	Simplified approach	-	-
6	Delta-plus approach	-	-
7	Scenario approach	-	-
8	Securitisation (specific risk)	-	-
9	**Total**	**52**	**4**

Interest rate risk in the banking book

In contrast to credit risks, other market risks (foreign currency risks) or operational risks, the CRR does not provide for regulatory capital backing for interest rate risk in the banking book.

Irrespective of the fact that no capital backing is provided, pbb Group applies the same methods and processes for interest rate risk in the banking book as for market risk measurement, which are described in the chapter "Management of Market Risk". As explained there, pbb also includes the periodic interest rate risks in addition to the present value interest rate risks, and measures, manages and monitors these risks on a regular basis.

pbb is subject to direct supervision by the ECB and fulfils the additional own funds requirements and capital requirements in accordance with the ECB's SREP.

Risk metrics and risk reporting

Present value interest rate risk

Present value interest rate risks in the banking book comprise the risk to the economic value of an institution arising from unfavourable interest rate movements with an impact on interest rate-sensitive instruments, including yield curve risk (gap risk), basis risk and option risk. These present value risks, measured in the form of sensitivities and value-at-risk ratios, are determined on a daily basis by Risk Management & Control (RMC) for all interest rate-sensitive positions in the banking book, independently of trading. Compliance with the sensitivity triggers and the value-at-risk (VaR) limits is also reviewed on a daily basis and reported to pbb's Management Board. The internal and regulatory stress scenarios specific to the present value interest rate risk in the banking book, including the six interest rate scenarios specified by the EBA guidelines EBA/GL/2018/02 and EBA/GL/2022/14 (valid since 30 June 2023), are calculated on a monthly basis.

Periodic interest rate risk

The periodic interest rate risk in the banking book reflects the risk of changes in the yield curves in relation to the bank's earnings position. The measurement considers the changes in net interest income under the assumption of a constant balance sheet total (delta static net interest income) in accordance with IFRS 9, which result from interest rate changes. The calculation is performed on a quarterly basis with a simulation horizon of the following four quarters.

In addition, the dynamic earnings model is used for the internal management of periodic interest rate risk (in accordance with EBA/GL/2018/02 and EBA/GL/2022/14). In contrast to static net interest income, no constant balance sheet total is assumed here; instead, new business data is taken from the multi-year plan and, in addition to net interest income, net commission income, net realised gains/losses, net gains/losses from financial instruments at fair value through profit or loss and changes in accumulated other comprehensive income are calculated. Negative deviations from the base value are always monitored at the end of each quarter with a trigger for the change in the income statement and in accumulated other comprehensive income. In pbb's various interest rate stress scenarios, the triggers were not triggered in the disclosure period from 30 June 2023 to 31 December 2023, nor in the first half of 2023. The periodic interest rate risk is assessed on a quarterly basis as part of the dynamic earnings model.

Information on models and parameters

Non-interest-bearing components of equity (liabilities side) are not taken into account in accordance with regulatory requirements (see EBA guidelines EBA/GL/2018/02 and EBA/GL/2022/14). However, the investments of these funds (asset side) are included in the calculations of interest rate risks in the banking book.

Present value interest rate risk

In the present value calculation of regulatory shocks, risk-free yield curves are used for discounting, which are based on currency-specific overnight index swap curves. Consequently, the cash flows of all financial instruments included in the interest rate risk in the banking book do not contain any customer-related margins. In addition, the present value analysis is based on a static balance sheet as at the reporting date (i.e. there are no assumptions regarding the reinvestment of expiring transactions or new business). On the other hand, assumptions are made about the cash flows of recognised value adjustments and their fixed interest rates. There are also special assumptions regarding early loan repayments and for the interest rate adjustment period for open-ended core deposits in the retail business. The average period for interest rate adjustments allocated to these core deposits is approximately 0.85 years, while the longest period for interest rate adjustments is 3.0 years. The contractual one-day (overnight) fixed-interest period applies to the interest rate adjustment period for open-ended deposits outside the core deposits in the retail business.

Periodic interest rate risk

In the case of periodic interest rate risk in the banking book, maturing transactions or amortising portions are concluded again on an equivalent basis, assuming a constant balance sheet total. The constant balance sheet assumption (prolongation assumptions) is used to prolong maturing or amortising portions of assets, liabilities and derivatives with equivalent characteristics, particularly with regard to volume, currency, term, fixed interest rate and interest rate scenario-specific conditions. Overnight money is used in accordance with its fixed conditions and rolled over on a rolling basis. Furthermore, the model book implemented at pbb for early repayment behaviour is also used for the internal method.

Risk management and minimisation strategy

For sustainable management, the aim is to achieve stable earnings power on condition that the (normative and economic) risk-bearing capacity is given and specific risk limits and triggers are adhered to. Equity must be maintained or strengthened from the annual result and an expected dividend payment must be made. The range of fluctuation in the periodic income statement result due to interest rate and credit spread influences is also monitored and limited.

The present value of long-term interest rate risks without customer margins is measured daily and managed as efficiently as possible using natural hedging (reduction of interest rate risks via offsetting underlying transactions without derivatives), portfolio hedging (portfolio fair value hedge accounting), micro hedges (micro fair value hedge accounting) and derivatives outside of hedge accounting.

Quantitative disclosures on interest rate risk in the banking book

The table EU IRRBB1 in accordance with article 448 (1) letters a and b CRR shows the interest rate risk in the banking book for the pbb Group. The table includes the change in net interest income and the present value of the banking book positions in the event of shifts in the yield curves within the six interest rate scenarios specified in the EBA guidelines EBA/GL/2018/02 and EBA/GL/2022/14.

Present value interest rate risk

Overall, as at 31 December 2023, pbb Group shows the largest negative present value change potential from the interest rate shock scenario, which simulates a parallel upward shift of the yield curves, under the above-mentioned assumptions in accordance with the EBA/GL/2018/02 and EBA/GL/2022/14 guidelines. In this scenario, the present value loss in the banking book amounts to € 206 million.

Periodic interest rate risk

With regard to periodic interest rate risks, a sudden parallel rise in the yield curves would have a slightly negative impact on the delta static NII. The change in the delta static NII as at 31 December 2023 amounts to a total of € -2 million in the event of a parallel shift in the yield curves by +200 basis points or € 5 million in the event of a parallel shift of -200 basis points (with a dynamic interest rate floor in accordance with the EBA/GL/2018/02 and EBA/GL/2022/14 guidelines). The change compared to the previous reporting period is mainly due to the balance sheet structure and the Static NII method.

EU IRRBB1: Interest rate risks in the banking book

		a	b	c	d
	Supervisory shock scenarios	Changes in economic value of equity [1]		Changes of the net interest income [2]	
All figures in € million		31.12.2023	30.06.2023	31.12.2023	30.06.2023
1	Parallel up	-206	-244	-2	-52
2	Parallel down	129	130	5	41
3	Steepener	1	-1	-	-
4	Flattener	-42	-47	-	-
5	Short rate up	-106	-114	-	-
6	Short rate down	62	61	-	-

[1] ∆ EVE: Measure of changes in the present value of all interest-sensitive instruments in the banking book resulting from sudden interest rate movements, assuming that all positions in the banking book expire without replacement.

[2] ∆ NII: The NII change is an earnings-based measure and measures the change in net interest income resulting from a sudden interest rate movement within the following four quarters. The ∆ NII figures shown relate to a parallel shift in the yield curves of +/- 200 basis points.

Liquidity and funding risk

This chapter shows the risk management objectives and the risk management policy for the liquidity and funding risk of pbb Group in accordance with articles 435 (1) and 451a (1) and (4) CRR. In addition, it contains information on the liquidity coverage ratio (LCR) and the structural liquidity ratio (NSFR) of pbb Group in accordance with Article 451a (2) and (3) CRR.

Management of liquidity and funding risk

Definition

Liquidity risk is the risk of not being able to fulfil existing or future payment obligations in full or on time, or not being able to fulfil them in full or on time.

Liquidity and valuation process

In accordance with the Supervisory Review and Evaluation Process (SREP), pbb has implemented an Internal Liquidity Adequacy Assessment Process (ILAAP), which was reviewed and approved by the Management Board. The ILAAP is intended to ensure that all material liquidity and funding risks are identified, measured and monitored, and that measures can be taken in good time to avoid a liquidity bottleneck if necessary.

Risk strategy

The Management Board defines the risk strategy and risk appetite. The liquidity risk strategy is a key component of the risk strategy and is divided into various components (different liquidity scenarios under given market and stress conditions). The aim is to ensure that both short-term and medium-term refinancing is monitored and managed using a limit system. The limits are set as part of the annual business planning process and are approved by the Management Board.

Organisation

Risk Management & Control (RMC) identifies, measures, reports and monitors liquidity risk. The Treasury department, which is independent of RMC, is responsible for managing the risk. The processes and methods used are regularly reviewed by the Risk Committee and the Asset Liability Committee. Liquidity risk cannot be calculated and reported on a segment basis.

Risk reporting

Liquidity management reports are prepared on a daily basis and reported to the entire Management Board as well as to the Joint Supervisory Team (JST) of the ECB and the national supervisory authorities responsible for pbb, among others. The reports include the current liquidity situation as well as projections based on contractual cash flows and assumptions made regarding future events which will influence the expected development of liquidity.

Risk quantification - liquidity risk measurement and limitation

A system for measuring and limiting short-term and medium-term deviations within cash flows has been installed to manage liquidity risks. In addition to contractual cash flows, optional cash flows are also recognised. This data is regularly subjected to backtesting.

The liquidity position, which results from the liquidity reserve and the contractual and optional cash flows, is measured in different scenarios. Various liquidity positions are calculated on a daily basis. The three liquidity positions assume

- constant market and refinancing conditions (base scenario),
- Risk scenario (modified (historical) stress scenario) and
- Liquidity stress ((historical) stress scenario).

In the risk and (historical) stress scenario, for example, possible customer behaviour in "stress situations" is simulated. Here, 95% and 99% quantiles are calculated on the basis of historical time series.

Triggers (early warning indicators) were defined for liquidity risk in the base scenario over a period of 24 months. The limits in the risk and (historical) stress scenario apply for a period of six and three months respectively.

The limit system consists of:

- Limit on the liquidity stress profile (risk scenario and [historical] stress scenario) and
- Trigger for the base scenario and the 6-month bucket of the (historical) stress scenario.

In addition to reporting, pbb Group uses regular stress tests to analyse additional stress events on the liquidity position.

Possible effects of macroeconomic, monetary policy and political crises on the liquidity situation are simulated as part of the scenario analyses.

The scenarios are reported to pbb's Management Board as well as to external bodies such as the ECB's JST responsible for pbb and the national supervisory authorities.

Risk monitoring and risk management

Liquidity risks are monitored by means of daily reporting on the liquidity situation and a defined escalation process. Among other things, a liquidity contingency plan was adopted in this context, which forms the technical and organisational framework for dealing with liquidity bottlenecks. The liquidity contingency plan is part of pbb's recovery plan and is updated at least annually.

Liquidity risk management is based on various interlinked components (daily and monthly liquidity reports), which are based on a "liquidity risk tolerance" defined by the Management Board. This is intended to ensure that pbb Group has sufficient liquidity reserves.

Risk protection and risk minimisation

The limitation of liquidity risk is ensured via a risk tolerance system. Risk tolerance is integrated into the liquidity management process via triggers (limit system) in order to ensure a "survival period" for pbb Group in the event of stress.

The limits for risk tolerance are determined as part of stress scenarios and adjusted regularly.

Opportunities

The cumulative liquidity position in the base scenario listed in the section "Development of liquidity risk" generally opens up the opportunity to react flexibly, particularly with regard to potential new business.

In the event that the external factors mentioned in the "Development of liquidity risk" section "Forecasted liquidity requirements" were to develop favourably overall, this would per se lead to lower future liquidity requirements.

Development of liquidity risk

Development of pbb Group's risk position

The cumulative liquidity position (liquid assets and forecast balance of cash flows) calculated as part of the liquidity risk measurement as at 31 December 2023 in the base scenario amounted to € 4.9 billion over a twelve-month period. There was no change compared to the previous year when looking at the corresponding period. As at 31 December 2023, the cumulative liquidity position in the risk scenario in the 6-month forecast was € 2.5 billion (31 December 2022: € 2.2 billion). The cumulative liquidity position in the stress scenario in the 6-month forecast was € 1.5 billion as at 31 December 2023 (31 December 2022: € 0.9 billion).

Regulatory liquidity coverage requirements

The liquidity coverage ratio (LCR) is calculated from the ratio of the liquidity buffer ("liquid assets") to the net liquidity outflows during a stress phase of 30 days. A minimum value of 100% for the liquidity coverage ratio must be observed in the regulatory liquidity reports. The values determined were well above 100% at all times in 2023. The liquidity coverage ratio as at 31 December 2023 was 212%.

Since 30 June 2021, a value of 100% must be maintained for the NSFR. The NSFR shows the ratio of available stable funding (ASF) and required stable funding (RSF) and is intended to ensure medium and long-term structural liquidity. The values determined in 2023 were well above the legally required minimum ratio. The NSFR as at 31 December 2023 was 111%.

Further information on the LCR and NSFR can be found in the chapters "Liquidity coverage ratio" and "Structural liquidity ratio".

Refinancing markets

With regard to the developments on the funding markets and the change in the funding volume during the reporting period, please refer to the comments in pbb Group's Annual Report 2023, Economic Report, section "Financial position".

Forecasted liquidity requirements

In addition to the forecast liquidity requirements for new business activities, the amount of future liquidity requirements also depends on a number of external factors:

- Reaction of monetary policy to inflation trends ("abrupt interest rate hikes") as well as geopolitical risks and their potential impact on the real economy
- Possible impact of ESG factors on credit spreads and refinancing options
- Future development of discounts on securities in repo financing on the market and at central banks
- Possible additional collateral requirements due to changing market parameters (such as interest rates and foreign exchange rates)
- Development of the requirements for hedging transactions
- Changed requirements of the rating agencies with regard to the required over-collateralisation in the cover pools
- Refinancing requirements of property investors.

Refinancing risk

The refinancing risk as part of the business and strategic risk is described in the section "Economic capital and risk-bearing capacity (ICAAP)".

Market liquidity risk

Quantitative information for a better assessment of the market liquidity risk for financial instruments can be found in the presentation of the three levels of the fair value hierarchy in pbb Group's Annual Report 2023, Note 72 Fair values of financial instruments. For portfolios measured at amortised cost, there is generally no intention to sell from a liquidity management perspective, as liquidity can be generated for these mainly by transferring them to cover pools, central bank refinancing options or repo transactions. Market liquidity risk is taken into account in internal management as part of market risk.

Liquidity coverage ratio

The liquidity coverage requirement or liquidity coverage ratio (LCR) is calculated from the ratio of an institution's liquidity buffer (i.e. the portfolio of high-quality liquid assets) and its net liquidity outflows during a stress phase of 30 calendar days and is expressed as a percentage.

In accordance with Article 412 CRR, the LCR is intended to oblige institutions to maintain a liquidity buffer in the form of highly liquid assets in order to be able to compensate for net cash outflows over a period of 30 days in the event of stress. The specified stress scenario includes both market-wide and institution-specific effects. In stress periods, institutions may use their liquid assets to cover their net liquidity outflows, even if such use of liquid assets results in the liquidity coverage ratio falling below the applicable minimum value of 100% in such phases.

Regulatory requirements stipulate a minimum LCR of 100%. The values determined for pbb Group were significantly above this minimum value at all times in the fourth quarter of 2023 as well as in the entire financial year 2023. The LCR as at the disclosure date of 31 December 2023 was 212% (30 September 2023: 218%).

Information on the liquidity coverage ratio

The following table EU LIQ1 in accordance with article 451a (2) CRR shows the information on the LCR for the pbb Group. The information comprises the values and figures as at the disclosure date of 31 December 2023 and for each of the three calendar quarters preceding the disclosure date. In contrast to the reporting date values mentioned above, these values and figures are calculated as simple averages of the end-of-month surveys over the twelve months preceding the end of each quarter. Table EU LIQ1 contains all items relevant for the LCR calculation.

The average value of the LCR as at 31 December 2023 is 255% (EU LIQ1, row 23, column e). This is mainly due to the high liquidity reserve, consisting of highly liquid assets (HQLA). Changes in the liquidity reserve and in net liquidity outflows are due to the different dynamics of new business in property financing and its refinancing.

Liquidity management within pbb Group

pbb is the only credit institution of pbb Group. Liquidity management is carried out exclusively by pbb.

Sources of refinancing

pbb Group utilises a broad range of funding sources. In addition to deposits from private and institutional clients, funding is obtained by issuing Pfandbriefe, promissory notes and unsecured bonds on the capital market, as well as via open market transactions with the ECB and repo transactions on the interbank market and on Eurex.

Liquidity buffer

As at the disclosure date, the liquidity reserves totalled € 3,748 million (average value), consisting of highly liquid level 1 assets. The liquidity buffer consists primarily of liquid funds and HQLA Level 1 bonds. Level 1 includes deductible deposits with Deutsche Bundesbank, bonds issued by central governments, regional or local authorities, public bodies, multilateral development banks or international organisations and banks with government guarantees.

Liquidity outflows and inflows

Liquidity inflows are influenced in particular by expected loan repayments and refinancing funds raised. The liquidity outflows are broken down as follows (in order of magnitude):

- Mortgage loans or other loans committed but not yet drawn down
- refinancing funds due
- potential requests for collateral.

On average, cash flows from derivative positions only accounted for a small proportion of the total net cash flows in the fourth quarter of 2023. pbb Group uses a historical look-back approach (HLBA) as the methodology for calculating potential collateral calls for derivatives, i.e. collateral calls observed in the past are analysed and a conservative assumption for potential future collateral calls is derived from this. On average, this assumption was € 470 million. Possible rating changes are not expected to have any significant impact on the provision of collateral.

Currency mismatch

As of the disclosure date, pbb Group has one significant currency in accordance with article 415 (2a) CRR, the foreign currency US dollar (USD), whose aggregated liabilities amount to at least 5% of total liabilities. At the end of the third quarter of 2023, no foreign currency accounted for more than 5% of aggregated liabilities. The foreign currency positions have no significant impact on the liquidity position.

EU LIQ1: Quantitative information on the LCR

All figures in € million, unless otherwise stated		a	b	c	d	e	f	g	h
		Total unweighted value (average) [1]				Total weighted value (average) [1]			
EU 1a	**Quarter ending on:**	**31.12.2023**	**30.09.2023**	**30.06.2023**	**31.03.2023**	**31.12.2023**	**30.09.2023**	**30.06.2023**	**31.03.2023**
EU 1b	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
High-quality liquid assets									
1	Total high-quality liquid assets (HQLA)	---	---	---	---	**3,748**	**4,094**	**4,719**	**5,207**
Cash outflows									
2	Retail deposits and deposits from small business customers, of which:	1,089	1,196	1,175	1,102	227	249	247	235
3	Stable deposits	-	-	-	-	-	-	-	-
4	Less stable deposits	1,076	1,183	1,160	1,085	215	237	232	217
5	Unsecured wholesale funding	827	832	899	855	657	649	676	612
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	-	-	-	-	-	-	-	-
7	Non-operational deposits (all counterparties)	369	413	484	510	199	230	261	267
8	Unsecured debt	458	419	415	345	458	419	415	345
9	Secured wholesale funding	---	---	---	---	30	61	61	53
10	Additional requirements	470	465	469	470	470	465	469	470
11	Outflows related to derivative exposures and other collateral requirements	470	465	469	470	470	465	469	470
12	Outflows related to loss of funding on debt products	-	-	-	-	-	-	-	-
13	Credit and liquidity facilities	-	-	-	-	-	-	-	-
14	Other contractual funding obligations	105	44	30	25	85	25	11	7
15	Other contingent funding obligations	2,597	2,722	2,941	3,185	740	777	864	988
16	**Total cash outflows**	---	---	---	---	**2,209**	**2,226**	**2,327**	**2,365**
Cash inflows									
17	Secured lending (e.g. reverse repos)	432	404	450	246	101	6	8	5
18	Inflows from fully performing exposures	517	479	435	429	333	306	278	269
19	Other cash inflows	191	155	140	138	191	155	140	138
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)	---	---	---	---	-	-	-	-
EU-19b	(Excess inflows from a related specialised credit institution)	---	---	---	---	-	-	-	-
20	**Total cash inflows**	1,140	1,038	1,024	813	**625**	**467**	**425**	**411**
EU-20a	Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b	Inflows subject to 90% cap	-	-	-	-	-	-	-	-
EU-20c	Inflows subject to 75% cap	1,140	1,038	1,024	813	625	467	425	411
Total adjusted value									
EU-21	**Liquidity buffer**	---	---	---	---	**3,748**	**4,094**	**4,719**	**5,207**
22	**Total net cash outflows**	---	---	---	---	**1,585**	**1,759**	**1,902**	**1,953**
23	**Liquidity coverage ratio (%)**	---	---	---	---	**255**	**237**	**254**	**275**

[1] The values and figures are calculated as at the disclosure date and for each of the three calendar quarters preceding the disclosure date as simple averages of the end-of-month surveys over the twelve months preceding the end of each quarter.

Net stable funding ratio

The net stable funding ratio (NSFR) is calculated from the ratio of available stable funding (ASF) and required stable funding (RSF); the NSFR is stated as a percentage.

In contrast to the liquidity coverage ratio (LCR), which is intended to ensure a liquidity buffer in the event of stress over a period of 30 days, the net stable funding ratio (NSFR) is intended to ensure medium and long-term structural, stable liquidity. The aim of the NSFR is to ensure a sustainable maturity structure of assets and liabilities. The determining factors are property financing on the one hand and the corresponding refinancing on the other. In this context, pbb Group does not treat any assets and liabilities as interdependent.

Under regulatory law, a minimum value of 100% must be maintained for the net stable funding ratio. The figures determined for pbb Group were significantly above this required minimum ratio at all times in the second half of 2023, as in the financial year 2023 as a whole. The NSFR as at the disclosure date of 31 December 2023 was 111% (30 June 2023: 114%).

Quantitative information on the net stable funding ratio

The following tables EU LIQ2 pursuant to Article 451a (3) CRR show the quarter-end figures regarding the NSFR for the pbb Group for each quarter of the relevant disclosure period 2023.

The fluctuations in the NSFR in the second half of 2023 are mainly due to changes in the maturity structure of assets and liabilities. In particular, roll-down effects on refinancing funds should be mentioned here.

EU LIQ2: Net stable funding ratio (quarter-end values as at 31 December 2023)

		a	b	c	d	e
Quarter-end figures as of 31.12.2023		**Unweighted value by residual maturity**				**Weighted value**
All figures in € million, unless otherwise stated		**No maturity**	**< 6 months**	**6 months to < 1yr**	**≥ 1 year**	
Available stable funding (ASF) items						
1	Capital items and instruments	3,286	-	-	396	3,682
2	Own funds	3,286	-	-	396	3,682
3	Other capital instruments	---	-	-	-	-
4	Retail deposits	---	1,903	1096	3,625	6,324
5	Stable deposits	---	-	-	-	-
6	Less stable deposits	---	1,903	1096	3,625	6,324
7	Wholesale funding:	---	7,673	3,224	27,317	29,269
8	Operational deposits	---	-	-	-	-
9	Other wholesale funding	---	7,673	3,224	27,317	29,269
10	Interdependent liabilities	---	-	-	-	-
11	Other liabilities:	181	60	-	68	68
12	NSFR derivative liabilities	181	---	---	---	---
13	All other liabilities and capital instruments not included in the above categories	---	60	-	68	68
14	**Total available stable funding (ASF)**	---	---	---	---	**39,342**
Required stable funding (RSF) items						
15	Total high-quality liquid assets (HQLA)	---	---	---	---	963
EU-15a	Assets encumbered for more than 12m in cover pool	---	-	-	24,871	21,140
16	Deposits held at other financial institutions for operational purposes	---	-	-	-	-
17	Performing loans and securities:	---	4,013	2,280	10,088	10,996
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut	---	-	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions	---	1,241	153	399	542
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, thereof:	---	2,376	1,921	8,159	10,113
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	79	62	222	987
22	Performing residential mortgages, thereof:	---	366	181	1,161	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	178	155	932	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	---	30	25	1,012	887
25	Interdependent assets	---	-	-	-	-
26	Other assets:	-	2,588	-	168	1,535
27	Physical traded commodities	---	---	---	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	---	-	-	-	-
29	NSFR derivative assets	---	-	-	-	-
30	NSFR derivative liabilities before deduction of variation margin posted	---	1,285	-	-	64
31	All other assets not included in the above categories	---	1,303	-	168	1,471
32	Off-balance sheet items	---	-	-	2,420	676
33	**Total RSF**	---	---	---	---	**35,311**
34	**Net stable funding ratio (%)**	---	---	---	---	**111**

EU LIQ2: Net stable funding ratio (quarter-end values as at 30 September 2023)

		a	b	c	d	e
Quarter-end figures as of 30.09.2023		**Unweighted value by residual maturity**				**Weighted value**
All figures in € million, unless otherwise stated		**No maturity**	**< 6 months**	**6 months to < 1yr**	**≥ 1 year**	
Available stable funding (ASF) items						
1	Capital items and instruments	3,100	-	-	416	3,517
2	Own funds	3,100	-	-	416	3,517
3	Other capital instruments	---	-	-	-	-
4	Retail deposits	---	2,154	874	2,941	5,666
5	Stable deposits	---	-	-	-	-
6	Less stable deposits	---	2,154	874	2,941	5,666
7	Wholesale funding:	---	4,801	3,747	27,429	29,745
8	Operational deposits	---	-	-	-	-
9	Other wholesale funding	---	4,801	3,747	27,429	29,745
10	Interdependent liabilities	---	-	-	-	-
11	Other liabilities:	258	20	-	56	56
12	NSFR derivative liabilities	258	---	---	---	---
13	All other liabilities and capital instruments not included in the above categories	---	20	-	56	56
14	**Total available stable funding (ASF)**	---	---	---	---	**38,985**
Required stable funding (RSF) items						
15	Total high-quality liquid assets (HQLA)	---	---	---	---	707
EU-15a	Assets encumbered for more than 12m in cover pool	---	-	-	24,040	20,434
16	Deposits held at other financial institutions for operational purposes	---	-	-	-	-
17	Performing loans and securities:	---	4,348	1,930	9,065	10,596
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut	---	-	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions	---	210	98	391	460
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, thereof:	---	3,485	1,635	7,164	9,773
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	69	62	124	1,072
22	Performing residential mortgages, thereof:	---	623	171	1,122	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	375	160	1,014	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	---	30	26	1,119	984
25	Interdependent assets	---	-	-	-	-
26	Other assets:	-	2,997	-	201	1,600
27	Physical traded commodities	---	---	---	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	---	-	-	-	-
29	NSFR derivative assets	---	-	-	-	-
30	NSFR derivative liabilities before deduction of variation margin posted	---	1,683	-	-	84
31	All other assets not included in the above categories	---	1,315	-	201	1,516
32	Off-balance sheet items	---	-	-	2,727	768
33	**Total RSF**	---	---	---	---	**34,105**
34	**Net stable funding ratio (%)**	---	---	---	---	**114**

EU LIQ2: Net stable funding ratio (quarter-end values as at 30 June 2023)

Quarter-end figures as of 30.06.2023		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
All figures in € million, unless otherwise stated		No maturity	< 6 months	6 months to < 1yr	≥ 1 year	
Available stable funding (ASF) items						
1	Capital items and instruments	3,184	-	-	446	3,629
2	Own funds	3,184	-	-	446	3,629
3	Other capital instruments	---	-	-	-	-
4	Retail deposits	---	1,973	990	2,653	5,319
5	Stable deposits	---	-	-	-	-
6	Less stable deposits	---	1,973	990	2,653	5,319
7	Wholesale funding:	---	5,838	4,965	27,143	30,183
8	Operational deposits	---	-	-	-	-
9	Other wholesale funding	---	5,838	4,965	27,143	30,183
10	Interdependent liabilities	---	-	-	-	-
11	Other liabilities:	335	-	-	79	79
12	NSFR derivative liabilities	335	---	---	---	---
13	All other liabilities and capital instruments not included in the above categories	---	-	-	79	79
14	**Total available stable funding (ASF)**	---	---	---	---	**39,210**
Required stable funding (RSF) items						
15	Total high-quality liquid assets (HQLA)	---	---	---	---	1,340
EU-15a	Assets encumbered for more than 12m in cover pool	---	-	-	24,091	20,478
16	Deposits held at other financial institutions for operational purposes	---	-	-	-	-
17	Performing loans and securities:	---	6,123	2,835	9,127	10,804
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut	---	2,356	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions	---	203	39	388	428
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, thereof:	---	2,991	2,480	7,166	9,931
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	74	68	167	1,123
22	Performing residential mortgages, thereof:	---	546	287	1,082	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	320	276	993	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	---	27	30	1,168	1,021
25	Interdependent assets	---	-	-	-	-
26	Other assets:	-	2,588	-	203	1,284
27	Physical traded commodities	---	---	---	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	---	-	-	-	-
29	NSFR derivative assets	---	-	-	-	-
30	NSFR derivative liabilities before deduction of variation margin posted	---	1,586	-	-	79
31	All other assets not included in the above categories	---	1,002	-	203	1,205
32	Off-balance sheet items	---	-	-	2,254	582
33	**Total RSF**	---	---	---	---	**34,488**
34	**Net stable funding ratio (%)**	---	---	---	---	**114**

EU LIQ2: Net stable funding ratio (quarter-end values as at 31 March 2023)

Quarter-end figures as of 31.03.2023		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
All figures in € million, unless otherwise stated		No maturity	< 6 months	6 months to < 1yr	≥ 1 year	
Available stable funding (ASF) items						
1	Capital items and instruments	3,217	-	-	521	3,738
2	Own funds	3,217	-	-	521	3,738
3	Other capital instruments	---	-	-	-	-
4	Retail deposits	---	1,900	1164	2,332	5,090
5	Stable deposits	---	-	-	-	-
6	Less stable deposits	---	1,900	1164	2,332	5,090
7	Wholesale funding:	---	8,614	2,903	30,370	32,340
8	Operational deposits	---	-	-	-	-
9	Other wholesale funding	---	8,614	2,903	30,370	32,340
10	Interdependent liabilities	---	-	-	-	-
11	Other liabilities:	288	-	-	96	96
12	NSFR derivative liabilities	288	---	---	---	---
13	All other liabilities and capital instruments not included in the above categories	---	-	-	96	96
14	**Total available stable funding (ASF)**	---	---	---	---	**41,264**
Required stable funding (RSF) items						
15	Total high-quality liquid assets (HQLA)	---	---	---	---	1,450
EU-15a	Assets encumbered for more than 12m in cover pool	---	-	-	24,804	21,083
16	Deposits held at other financial institutions for operational purposes	---	-	-	-	-
17	Performing loans and securities:	---	6,295	3,500	9,011	10,925
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut	---	4,023	-	-	548
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions	---	116	179	349	450
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, thereof:	---	1,826	3,052	6,928	9,388
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	105	81	100	1,074
22	Performing residential mortgages, thereof:	---	304	239	1,197	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk	---	244	237	1,039	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products	---	27	30	1,206	1,108
25	Interdependent assets	---	-	-	-	-
26	Other assets:	-	2,503	-	174	1,093
27	Physical traded commodities	---	---	---	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	---	-	-	-	-
29	NSFR derivative assets	---	-	-	-	-
30	NSFR derivative liabilities before deduction of variation margin posted	---	1,668	-	-	83
31	All other assets not included in the above categories	---	836	-	174	1,010
32	Off-balance sheet items	---	-	-	2,780	641
33	**Total RSF**	---	---	---	---	**35,191**
34	**Net stable funding ratio (%)**	---	---	---	---	**117**

Operational risk

For the operational risk of pbb Group, this chapter shows the risk management objectives and the risk management policy in accordance with Article 435 (1) CRR as well as the information on the management of operational risk and the assessment of own funds requirements in accordance with Article 446 CRR. A disclosure according to article 446 letters b and c CRR as well as according to article 454 CRR is not relevant for pbb Group. pbb Group currently does not use advanced measurement approaches for calculating own funds requirements, but the standardised approach in accordance with Article 317 et seq. CRR.

Management of operational risk

Definition

In accordance with the CRR, pbb Group defines operational risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk". Within operational risk, the sub-risk types legal risk, behavioural risk, reputational risk, outsourcing risk, model risk as well as system, information and communication technology risk (system ICT risk) are taken into account.

Risk strategy

The aim of operational risk management is to prevent operational risk events and comply with the defined risk appetite. The key success factors here are early detection, systematic recording and assessment of operational risk, the implementation of risk mitigation measures and timely reporting to the Management Board. The strategy for the management of operational risk is approved annually by the Management Board as part of the overall risk strategy. It describes the management framework and the measures of pbb Group with regard to operational risk.

Organisation

A uniform Group-wide framework regulates the responsibilities for the management of operational risk based on the principle of three lines of defence. As risk owners, the division heads are responsible for managing operational risk and implementing measures to limit risk within the various business areas (first line of defence). The second line of defence is represented by Risk Management & Control (RMC) together with the units Operational Risk (all operational risks), Validation & Model Risk Management (model risk) as well as Data Protection and Information Security (ICT security risk), Compliance (compliance risks, conduct risk), Finance (outsourcing risk, tax risks), Business Continuity Management (BCM) in IT, Legal (legal risk) and Communications (reputational risk). Within RMC, the Operational Risk unit is responsible for uniform processes, tools and methods for identifying, assessing, quantifying, monitoring and reporting operational risk as the overarching second line of defence for all operational risks. The third line of defence is represented by Internal Audit.

Risk reporting, risk monitoring and risk management

Key components of operational risk management include recording, reporting and analysing internal and external loss data, operational risk self-assessment (ORSA), scenario analysis and stress testing. The structured and centralised reporting system ensures that the Management Board and division heads, the Risk Committee and the supervisory bodies are informed regularly, promptly and comprehensively about risk events. The reports are prepared both ad hoc (escalation of material risk events) and on a monthly (Group Risk Report), quarterly (Key Risk Indicator Report) or annual (Annual OpRisk

Report) basis. Operational risk reporting includes material loss events and near-losses, top risk topics, developments in risk indicators, the development of capital requirements and results from the ORSA and scenario analyses.

The management of system ICT risk and outsourcing risk is fully integrated into operational risk management, and hence into pbb's risk and compliance structure. SystemICT risk is generally managed at the process level. Important elements are the annual analysis of protection requirements and the quarterly reporting of relevant information and metrics such as key performance indicators (KPIs) and key risk indicators (KRIs). Central components of outsourcing risk management are the risk assessment of all outsourcing, which is updated at least once a year for significant outsourcing and at least every three years for non-significant outsourcing, ongoing support from the Outsourcing Accountable Person, monitoring using suitable key risk indicators and quarterly reporting in the Outsourcing Committee.

pbb Group uses models to quantify risks in the individual risk types and to measure the fair value of financial instruments. This gives rise to model risks which may be caused by incorrectly designed, incorrectly implemented or incorrectly applied models. In order to minimise model risks as far as possible, pbb has established a framework for managing model risks.

The main purpose of legal risk management is to avoid losses which may arise if pbb Group's business activities are not organised in a legally compliant manner. A legally compliant organisation of business activities also serves to protect the integrity and reputation of pbb Group. In order to achieve this, the Legal division supports pbb Group's business activities by providing forward-looking, comprehensive, business- and solution-oriented legal advice. The Legal division supports the various divisions in monitoring developments in the relevant legislation and case law, and examines their impact on new and existing business. The results are presented and discussed with the responsible divisions and/or in the Legal and Regulatory Risk Committee. The "Legal Policy" describes the role and responsibilities of Legal within pbb Group and serves as a guideline for employees in the Legal division. In addition, the Legal division provides the Finance division with an assessment of the need for provisions for outstanding legal cases. In addition, losses and provisions due to legal risks in connection with operational risk events are recorded in the OpRisk loss database. Overall, legal risk is taken into account as part of the existing operational risk framework and is an integral part of the key risk indicator report, the ORSA, the analysis and reporting of risk events and the determination of economic capital requirements, among other things.

ESG risks, which are part of operational risk, are also integrated into the management of operational risk.

Risk quantification

Details on the quantification of operational risk, including legal risk, and the calculation results for the economic capital for operational risk are described in the section "Economic capital and risk-bearing capacity (ICAAP)".

The regulatory capital requirement for operational risk, which is calculated once a year at the end of each year, amounted to € 78 million as at 31 December 2023 in accordance with the standardised approach pursuant to Article 317 et seq. CRR was € 78 million as at 31 December 2023 (€ 77 million as at 31 December 2022) and is explained in more detail in the "Capital requirements for operational risk" section below.

Opportunities

pbb Group aims to minimise operational losses as far as possible by clearly assigning responsibilities for the management of operational risk and by continuously developing the associated governance.

Operational risk profile

In 2023, pbb Group incurred a gross loss totalling € 5.9 million due to operational risk (2022: € 0.6 million). The net loss, which includes repayments, amounted to € 0.6 million in 2023 (2022: € 0.5 million). Overall, the risk profile for operational risk is assessed as stable.

Capital requirement for operational risk

Operational risk must be backed by own funds in order to comply with the own funds requirements in accordance with the CRR. pbb Group calculates the own funds backing for operational risk in accordance with the standardised approach pursuant to Article 317 et seq. CRR.

EU OR1: Capital requirements for operational risk and risk-weighted exposure amounts

		a	b	c	d	e
		Relevant indicator [1]			Own funds requirements	Risk weighted exposure amount
		Year-3	Year-2	Last year		
1	Banking activities subject to basic indicator approach (BIA)	-	-	-	-	-
2	Banking activities subject to standardised (SA) / alternative standardised (ASA) approaches	514	522	492	78	975
3	Subject to SA	514	522	492	----	----
4	Subject to ASA	-	-	-	----	----
5	Banking activities subject to advanced measurement approaches AMA	-	-	-	-	-

[1] After the annual financial statements have been approved and after the appropriation of profits.

The relevant indicator is determined for each business segment for the last three financial years in accordance with Article 316 CRR. The associated beta factors per business division correspond to the values defined in Article 317 CRR. Gross income is largely allocated to the regulatory business segment of Commercial Banking. An exception to this is the pbb direct deposit-taking business, which is allocated to the Retail Banking business segment. The business activities of pbb invest are allocated to the Asset Management business segment, although there were no capital contributions to the relevant indicator in the 2023 financial year. The own funds requirement for operational risk is calculated as the sum of the respective three-year averages of the relevant indicator per business segment, weighted with the associated beta factor.

The regulatory capital requirement, which is calculated once a year at the end of the year, amounted to € 78 million as at the disclosure date (31 December 2022: € 77 million).

pbb Group currently does not use advanced measurement approaches for calculating own funds requirements in accordance with Articles 321 to 324 CRR. In this respect, disclosure in accordance with Article 446 letters b and c CRR as well as Article 454 CRR is not relevant for pbb Group.

Environmental, social and governance (ESG) risk

This section shows the information on environmental, social and governance risks (ESG risks) in accordance with Article 449a CRR in conjunction with Article 435 CRR. Article 435 CRR. According to Article 449a CRR, the disclosure obligation is aimed at large, capital market-oriented institutions and comprises qualitative information on the handling of ESG risks (business model and strategy, corporate governance and management, risk management) as well as quantitative information on climate and environmental risks, physical risks and, in particular, transition risks resulting from the adjustment process towards a lower-carbon and more environmentally sustainable economy. The quantitative ESG disclosure requirements will be gradually supplemented with further qualitative and quantitative information by 31 December 2024 in accordance with Implementing Regulation (EU) 2022/2453.

Management of ESG risk

Definition

pbb Group defines ESG risk in accordance with EBA/REP/2021/18, the 7th MaRisk amendment and the ECB Guide on Climate and Environmental Risks as the risk of negative financial impact on the institution resulting from current or expected impacts of ESG factors on its counterparties or invested assets. ESG factors are environmental, social or governance issues that may have a positive or negative impact on the financial performance or solvency of a company, state or individual. ESG risk also includes negative financial, economic and social impacts that could arise from the activities of the institution itself. ESG risk includes the following components:

Environmental risks

pbb defines climate and environmental risks as risks of losses and negative effects resulting from climate change and environmental degradation. Climate and environmental risks are generally understood to comprise the following two main risk drivers:

> Physical risk: Physical risk refers to the financial impact of a changing climate. These impacts include the more frequent occurrence of extreme weather events and gradual climate change, as well as environmental degradation (such as air and water pollution, land pollution, water stress, biodiversity loss and deforestation). A physical risk is considered acute if it arises as a result of extreme events such as droughts, floods and storms. If it is the result of gradual changes (e.g. rising temperatures, rising sea levels, water stress, biodiversity loss, land use change, habitat destruction and resource scarcity), it is classified as chronic. The impacts can occur directly (for example as damage to property or in the form of reduced productivity) or indirectly, for example through subsequent events such as the disruption of supply chains.

> Transition risk: pbb defines transition risk (also referred to as "transition risk") as financial losses that institutions may incur directly or indirectly as a result of the adjustment process towards a lower-carbon and more environmentally sustainable economy. This risk could materialise, for example, as a result of sudden political measures to protect the climate and the environment, technological progress or changes in market sentiment and preferences.

Social risks

pbb defines social risks as the risks of negative financial effects on the institution which result from the current or future effects of social factors - in particular from the non-observance of human and labour rights and concerns, from any negative effects of economic activities on society/communities in general or in particular (for example on indigenous minorities or similar) as well as from product safety and end customers - on its counterparties or the invested assets. Negative effects may also result from social factors arising from the institution's own activities.

Governance risks

pbb defines governance risks as the risks of negative financial effects on the institution resulting from the current or future impact of governance factors on its counterparties or invested assets. Negative effects from governance factors may also result from the institution's own activities.

Sustainability strategy and pbb's understanding of sustainability

The principle of sustainability is the guiding principle for pbb Group in fulfilling its corporate responsibility. Sustainability is defined as the self-image of making a significant contribution to securing the long-term future through one's own actions, whilst taking into account the consequences for all of the Company's stakeholders as well as for society and the environment. pbb Group is convinced that law-abiding behaviour with integrity, responsible corporate governance and adherence to high ethical principles are a necessary condition for long-term business success. For this reason, pbb Group aims to combine economic success and sustainability aspects in the best possible way, thereby creating long-term benefits for society and conserving natural resources.

pbb Group's overarching objective remains to contribute to achieving the Paris Climate Agreement. For pbb Group, this means that it is working on aligning both its loan portfolio and its business operations with the 1.5 degree target.

pbb adopted a comprehensive ESG strategy for the first time in 2021 and has continuously developed it since then. This takes into account the growing importance of sustainability for society and the economy, and encourages all organisational units of pbb Group to address the issue of sustainability.

To determine the material sustainability aspects, pbb Group conducted a comprehensive materiality analysis in 2019, which has since been reviewed annually for its validity. The individual ESG topics and the aspects assigned to them were assessed with regard to their relevance for pbb Group's business activities, as well as the impact of the Group's business activities on sustainability aspects (inside-out and outside-in perspective) and their categorisation along the value chain. These remained largely unchanged in 2023 compared with previous years.

The greatest influence on pbb Group's business activities is exerted by the sector-specific aspects of sustainable financing solutions, client orientation and risk management, as well as corporate governance aspects and employee matters. In contrast, environmental issues in terms of pbb Group's own consumption of resources and social issues have a relatively minor influence due to the business model. The issues of respecting human rights and combating corruption and bribery are also relevant for pbb Group.

The five strategic ESG objectives of pbb Group resulting from the overarching ESG topics are

- Positioning as a transformation (re-)financier in the property industry
- Sustainable (re)financing
- Sustainable operational ecology
- Fulfilment of regulatory requirements
- Holistic transparency and communication as the basis of pbb Group's economic success and its values

With the ESG Strategy 2023, pbb Group is strategically developing its positioning as a transformation financier with an increased level of ambition. For quantitative management, pbb uses a system of key figures which also takes regulatory indicators and market developments into account. In the last two years, the focus has been on determining green asset ratios (GAR), among other things. However, from pbb Group's perspective, the GAR according to the EU taxonomy are not meaningful with regard to the actual share of environmentally sustainable assets, as there are already restrictions in terms of taxonomy eligibility, depending on the size and capital market orientation of clients, among other things. No market practices have yet emerged for adjusted and self-defined quotas. Looking ahead, the reduction of CO_2 appears to be emerging as an important cross-company objective. pbb Group is currently developing a climate pathway with the aim of actively steering the Real Estate Finance (REF) portfolio towards CO_2 reduction. pbb Group's climate pathway is geared towards limiting global warming to 1.5 degrees Celsius, calculated from the pre-industrial age to the year 2050. The precise intermediate steps towards this target are still being finalised.

As a first milestone, pbb has developed the Green Loan and Green Bond Framework, including the respective products, and has set itself the target of having a share of more than 30% Green Loan-eligible assets in the property financing portfolio by 2026. Green loan eligibility is assessed using the pbb Green Scoring Model, which evaluates defined environmental criteria based on the three pillars of energy efficiency, green building certifications and additional sustainability criteria (e.g. distance to public transport, use of green electricity) with an overall score between 0 and 100 or based on the EU taxonomy. In addition to this assessment, various other analyses are carried out, including as part of the new business analysis, such as using the decarbonisation tool based on the CRREM tool to determine the climate risks of the individual property. In addition, particular focus is placed on the opportunities for transformation into a sustainable property.

ESG target values

	KPI	Short and medium term targets 2024	2025	2026	Long term targets 2030	2050
Portfolio	Share of Green loan eligible assets of REF portfolio	target path →		> 30%		
	Share of Green loan eligible assets of REF in new business	target path →	32%		in definition	1,5° C
	Transparency rate of REF portfolio with pbb Green Score	75%				
Own business operation	CO_2eq Scope 1 emissions	target path →			250t	1,5° C
	CO_2eq Scope 2 emissions	target path →			6t	

The achievement of pbb's internally defined ESG targets is analysed using a tool-based approach. Reporting takes place as part of a half-yearly report, which is submitted to both the Management Board and the Supervisory Board. The target values and the management concept are reviewed annually by the ESG Committee. In addition, the management concept is being further developed as part of the transition plan currently being developed, which is intended to show a pbb climate pathway up to 2050 with interim targets, decarbonisation levers and specific measures for decarbonising the real estate loan portfolio.

pbb Group maintains a regular and intensive dialogue with its clients in order to understand their needs. In an initial ESG-related client dialogue, pbb analysed how its client base perceives the ESG topic in general, the associated transformation pressure and the resulting business opportunities. The dialogue also raised the profile of pbb's existing ESG expertise and ESG products. The information obtained from the dialogue serves as a basis for the further development of ESG portfolio analysis and management. As a further direct consequence, pbb co-founded Eco Estate GmbH as an ESG consulting company in 2023, and has held 35% of the shares in this company since then. It supports clients in developing holistic solutions on the path to sustainable property transformation by creating property transformation plans that are individually tailored to each property. This institutionalises the ESG dialogue between pbb Group and its clients.

pbb Group has established the ESG ecosystem in order to take holistic account of sustainability aspects of its properties. The first step is to collect and record comprehensive data on various sustainability aspects of the financed real estate properties. In addition to standard exchange methods from third-party providers, standardised pbb questionnaires and the pbb client portal can be used for structured data transfer.

In the Green Tool, pbb Group bundles relevant ESG data from internal sources and external providers (including physical risk data). Various ESG analyses are carried out on the basis of the ESG data collected, such as the e-taxonomy check, the Green Score analysis and the analysis of physical risks as well as the CRREM path or XDC grade analysis. Among other things, pbb Group uses these analysis results in client meetings for an early dialogue in order to identify possible ESG potentials and develop them together with the client, as well as for the ESG product range.

Environmental risks

pbb Group's lending business, which is subsumed under "Sustainable Financing Solutions", was categorised as material within the scope of the strategic review. In 2023, the "Environment" pillar was at the centre of the assessment of the sustainability of the financed portfolio. The clear focus of pbb Group is to align its loan portfolio with the 1.5 degree target.

The focus of the sustainability strategy with regard to environmental risks is on supporting the financing of the acquisition of green properties as well as green developments and transformation projects (manage-to-green) such as energy-efficient refurbishments and thus improvements in the energy efficiency of existing buildings. pbb Group has been offering green loans since the fourth quarter of 2021. The pbb Green Loan Framework was developed to assess which properties and financings are "green". It is based on two elements: pbb's own scoring model or the EU taxonomy.

In 2023, pbb's internal guidelines and instructions for dealing with ESG risks in the lending process were expanded and a new breach of the risk strategy in connection with non-green office properties in non-prime locations was implemented. Deviations from the principles of the risk strategy in the lending decision must be approved by the Management Board.

The existing portfolio was classified by querying the relevant data points as part of a client survey. Based on these data points, pbb classified and evaluated 73.6% of the real estate portfolio as of 31 December 2023, the strategically material portion of the loan portfolio with a pbb Green Score. Accordingly, pbb Group has gained a meaningful overview of the sustainability of its loan portfolio and the associated risks, and the basis for long-term management of ESG risks has been established. The data collected is integrated into pbb's own IT landscape and is updated on an ongoing basis.

Monitoring is carried out on a monthly basis with regard to all properties subject to pbb's "Green" scoring as well as the scores achieved, the breakdown by asset class and country and the identification of potential risk clusters. In 2023, monitoring was expanded and further developed with regard to early warning indicators for monitoring and early management of the REF portfolio and other monitoring aspects. The early warning indicators include a combination of LTV and pbb Green Score on a country basis and are intended to highlight any early negative developments at portfolio level. Compliance with the warning indicators and any breaches are reported quarterly by RMC in the Group Risk Report.

In addition to the initial or annually recurring risk analysis for new and existing business, ESG portfolio analyses are carried out on a regular basis. The aim is to recognise deviations from the ESG strategy at an early stage and to develop mitigating measures. Early warning indicators have been defined and implemented at portfolio and individual contract level for this purpose.

Social risks

As part of its strategic materiality analysis, pbb Group has categorised social issues as relevant. The topics of respecting human rights and combating corruption and bribery are also relevant for pbb Group.

With regard to the borrower, pbb has implemented a review of compliance with minimum (social) protection standards at counterparty level, differentiated according to (non-)financial companies and local or regional authorities, as part of the introduction of reporting and for the review of EU taxonomy conformity. The review was carried out for transactions that fulfil the "significant environmental contribution" criterion and do not significantly harm any other environmental objective. ("do no significant harm").

pbb Group conducts a due diligence review of (non-)financial companies, which is based on the recommendations of the Platform on Sustainable Finance (PSF). On the one hand, it checks whether the (non-)financial company has implemented appropriate processes to comply with each of the four components of the (social) minimum protection standards (human rights including labour rights, corruption, taxation, fair competition). On the other hand, the specific results that the company can demonstrate in these areas are reviewed. For example, convictions in court in connection with anti-corruption, tax or competition proceedings may have a negative impact. pbb Group can generally build on its existing "Know you Customer" (KYC) tools for due diligence, which are continuously updated and automatically generate alerts. The information used for due diligence includes the company's reporting, published strategies and policies, and stakeholder communication on the homepage. In addition, pbb Group has access to information from National Contact Points (NCP) and the Business & Human Rights Resource Centre (BHRCC). In addition, questionnaires sent to the company serve as an additional source of information.

pbb Group monitors compliance with the (social) minimum protection standards over the entire life cycle of the asset. The review cycle is based on the counterparty's risk and relevance rating.

In the case of local or regional authorities, the data of the respective higher-level central government can generally be used. Relevant human rights conventions must be signed and implemented by the superordinate state. Results from indices such as Freedom House in the area of human rights or the Corruption Perception Index according to Transparency International are decisive in the assessment. This information is usually available online.

Risk management

pbb Group defines ESG risks as the risks of negative financial impacts on the institution resulting from current or expected impacts of ESG factors[2] on its counterparties or invested assets[3] . ESG risk also includes negative financial, economic and social impacts that could arise from the activities of the institution itself. The climate and environmental, social and societal as well as corporate governance components included in ESG risk are anchored in both the business strategy and the risk strategy of pbb Group.

In addition to the requirements from the EU taxonomy (for E), the comprehensive, systematic materiality analysis in 2023 now also included materiality considerations as defined by the CSRD. The ESG factors were taken into account both quantitatively or as an expert estimate, depending on whether ESG risk data was available. For climate and environmental factors with available ESG risk data, a capital-related quantitative materiality threshold was already applied.

Identification and assessment of the materiality of environmental, social and governance risks

ESG factors affect the financial performance of institutions by potentially manifesting themselves in the financial risk types of credit, market, liquidity and funding risks as well as in non-financial risks such as operational risk and reputational risk. The business activities and invested assets of the institution as well as the impact channels of the risk factors are decisive for this.

[2] ESG factors are climate/environmental, social or governance issues that can have a positive or negative impact on the financial performance or solvency of a company, state or individual.

[3] ESG risks are defined in accordance with EBA/REP/2021/18, the 7th MaRisk amendment of 29 June 2023 and the ECB guidelines on climate and environmental risks.

An identification and assessment process for ESG risk drivers was established as an integral part of the annual risk inventory to ensure that ESG risk is adequately taken into account in the risk management processes. By identifying and describing the potential impact channels of possible ESG risk factors, it became clear to what extent

- the economic and financial activities of a company are affected (financial materiality/ outside-in) or
- how a company's activities impact ESG factors (environmental and social materiality/inside-out)

and in what time frame. The distinction between these two perspectives results from the application of the principle of "dual materiality" and must be applied when assessing materiality.

Overall, risk factors for climate, environment, social issues and governance were analysed. To conclude the assessment, the influence of the identified potential ESG risk drivers on the individual risk types is analysed and evaluated.

All relevant experts are involved in the steps of the assessment process, in particular those with knowledge of lending and property valuation, experts from the HR, legal and compliance departments as well as from the Risk Management & Control division.

The process of identifying material risk factors consists of the following four steps:

- Step 1 "Categorised list of risk factors"

  The starting point is the list of possible risk factors, which includes ESG risk factors from external publications such as the ECB guidelines on climate and environmental risks, the EU taxonomy or the CSRD requirements and is regularly reviewed and expanded.

- Step 2 "Channels of impact, effects and time horizon"

  Channels of impact are the causal chains that explain how these risk drivers affect pbb.

  Outside-in impact channels are taken into account, including a decline in customer creditworthiness or property value or collateral value, but also the costs of repairs following a loss event (from physical risks, for example) or business interruptions. The analysis of the effects also includes the consideration of mitigation measures and the time of occurrence of the effect under consideration (time horizon). pbb distinguishes between short-term (within one year), medium-term (1 to 5 years) and long-term (5 years or more) time horizons, whereby risk factors which are already relevant in the short term are also relevant in the medium and long term.

  Inside-out" effects include social influences or environmental issues such as possible environmental pollution that may result from the company's activities.

- Step 3 "Analysing and assessing the effects in terms of materiality"

  Analysing the impact forms the basis for determining financial materiality. The analysis of the ESG risk factor shows whether and to what extent there is an impact on relevant parameters and benchmarks for the institution (e.g. credit rating, property values, market shares) and therefore on the bank's risk profile. In addition, it is determined whether there is environmental and social materiality with regard to the risk factor.

- Step 4 "Relevance for the other risk types"

  Based on the analysis of the impact channels and the relevant parameters and benchmarks, it becomes clear which risk types are affected. Overall, credit risk, market risk, business and strategic risk, liquidity and funding risk and operational risk, including reputational risk, may be affected, as may other risk types.

  All relevant experts are involved in the steps of the assessment process. With regard to climate and environmental risk, these are in particular people with knowledge of lending and property valuation. With regard to S&G risk, experts from the HR, legal and compliance departments are involved. In addition, the experts for the individual risk types - in particular from the RMC, IT and Legal departments - are responsible for assessing the relevance of the respective risk type.

The results of the assessment of ESG risk factors (ESG materiality) are recorded in the annex to the risk inventory (ESG Risk Factor Assessment Template risk register). The analysed risk drivers, their possible impact channels, time horizons and the possible influence on the other risk types are documented.

The results of the risk inventory with regard to "ESG materiality" serve as the basis for formulating the ESG risk appetite as part of the risk strategy.

Analysed risk factors

In the ESG materiality assessment, all acute and chronic climate risks are taken into account as far as possible in accordance with the EU taxonomy. The Bank has drawn up and analysed its own list of assessed environmental factors and transitory factors in line with its business activities and regulatory requirements.

The list of social and governance factors was derived from CSRD (over)topics required by supervisory law. All analysed ESG risk factors are listed in the table below.

ESG risk factors

Type	ESG risk factors
Environmental **Physical risk:** **Acute climate-related hazards**	Floods, heavy precipitation, storms (including cyclones, hurricanes, typhoons), tornadoes, forest fires, drought, heat waves, cold spells/freezes, landslides, glacial lake outburst floods, avalanches, subsidence
Physical risk: **Chronic climate-related hazards**	Change in wind patterns, coastal erosion, soil degradation, soil erosion, solifluction, change in precipitation patterns and types, sea level rise, water scarcity, temperature variability, heat stress, permafrost thawing, variability of precipitation and/or hydrology, ocean acidification and saltwater intrusion
Physical risk: **Environmental factors**	Biodiversity loss/land use change/overuse of organisms/invasive alien species/habitat destruction, environmental pollution/contamination, production of hazardous waste/reusability/recyclability, water consumption intensity of objects/financing, exploitation of marine resources, earthquakes, volcanism, tsunami
Transitory risk factors	Energy efficiency, carbon footprint (Scope 1,2,3 emissions), new sustainability and environmental regulations / carbon pricing, market sentiment, financing of environmentally/socially harmful and unsafe industries - granting of financing
Social **risk factors**	Discrimination and inequality, consumer/end-user dissatisfaction, violation of other labour-related rights, inadequate working conditions, exploitation of workers in the value chain, disregard for affected communities; lack of social engagement
Governance **risk factors**	Unethical corporate behaviour culture, supplier management/unethical supplier behaviour and payment practices, anti-competitive behaviour and political engagement or lobbying, corruption and bribery

Climate and environmental risks

The assessment of materiality was carried out separately for the REF segment and the Non-Core (NC) segment according to pbb's business activities, and differentiated according to acute and chronic climate risks as well as biodiversity risks and other environmental risks.

Real Estate Finance

Acute climate hazards

In order to determine the exposure of properties in the Real Estate Finance (REF) segment, which are used as collateral in current loan agreements, to acute climate risks, external location-specific risk data was obtained from a suitable provider and analysed. Expected losses resulting from flooding, heavy rainfall, storms and tornadoes are available from the property location data. These loss expectations can be used to determine an expected annual loss for the properties, which can be translated into a possible change in the customer's (gross) LGD.

A materiality threshold for the expected loss (credit risk) was applied in order to take into account the future loss potential of environmental and climate risks due to climate change as well as current valuation uncertainties. In addition, an individual qualitative final expert judgement is mandatory in order to identify material climate risks.

The aforementioned data is available for other acute climate hazards. For these factors, we obtain a risk classification for the property locations via the public source hazard data. However, this risk classification does not include any expected damage values; the classification is based solely on the probability of material damage occurring. The portfolio market value in the "high risk" category is used for the quantitative materiality assessment of a climate hazard. As the exact damage potential cannot be taken into account quantitatively, this must be considered in the mandatory qualitative (final) assessment.

Chronic climate hazards

Similar to the data from the public source ThinkHazard! for acute climate hazards, risk classes for the chronic risk factors sea level rise and coastal erosion can be retrieved from "Aqueduct". For a materiality assessment of these chronic climate hazards, pbb applies the same materiality definition as for the quantitative assessment of acute climate hazards with ThinkHazard!, i.e. a risk factor is considered material if the market value of the REF portfolio assigned to the Aqueduct risk class "high/high" is at least € 10 million. The mandatory additional qualitative assessment is also ultimately decisive for chronic risk factors.

As a result of the quantitative and qualitative assessment, no chronic risk factors were identified as significant

Transitory risks

The materiality of the analysed transitory risk factors was determined qualitatively as part of an expert assessment. In addition, possible effects of transitory risk factors identified as material on the credit risk in various (climate) scenarios were quantitatively determined using suitable assumptions as part of the macroeconomic stress test.

Non-Core and Consolidation & Adjustments

A three-stage assessment process is used to assess acute and chronic climate risks in the Public and Corporate Finance segment. As it is not possible to draw on location-specific risk data, relevant climate and environmental risk data was identified at area level and the probability of occurrence and intensity of damage were assigned to the risk factors currently identified as critical. The assignment is then made in the form of four existence risk levels of environmental events: Low, Medium, High and Very High, each based on the event deviation from the event-specific norm.

In a second step (gross risk from an environmental event), the consequences of these existential risks of the respective environmental event for the affected borrowers/debtors or guarantors are then assessed, taking into account their creditworthiness (in the form of the currently assigned PD rating class) as an expression of their ability to absorb any losses.

In a third step, transaction-specific or counterparty-specific mitigating factors such as precautionary measures, contingency plans, adjustment plans, damage insurance, etc. are also taken into account in the net risk assessment.

At all three levels (existence risk, gross risk and net risk), the risk levels low and medium are still considered to be within the scope of normal environmental risk influences, which pbb's clients can generally absorb within the scope of their normal economic strength or normal risk reserves. The risk levels high and very high identify an environmental risk as exceeding the normal level of economic risks and must be regularly reviewed individually in the risk monitoring measures for potential losses for the Bank due to increased default risks and assessed in the annual credit monitoring process.

Other environmental risks

Biodiversity risk was considered as a further environmental risk. To identify pbb's biodiversity risk, sector-specific biodiversity scores were used and a portfolio analysis was carried out to obtain an initial overview of the biodiversity risk from a general perspective. Both the inside-out view (impact) and the outside-in view (dependency) were taken into account.

For the REF segment, additional granular analyses of the land cover type of the property locations were carried out. For this purpose, external satellite data was used to classify pbb's REF portfolio within the EU in terms of biodiversity risks resulting from land use changes. Buildings for which an increased risk was identified as part of this land use analysis were analysed in a further expert assessment.

As a result, no significant exposure or contribution to biodiversity loss was identified for the portfolio. In addition, estimates for probabilities of occurrence and impacts are determined as part of the CSRD materiality analysis and the OpRisk scenario analysis, and are also taken into account. Biodiversity is therefore categorised as not material for pbb.

To assess further environmental risks, suitable environmental scores were used as quantitative proxies for the impact of an industry sector on the environmental aspects mentioned. The scores indicate which sectors have a high/moderate/low risk of negative impacts on an environmental aspect. In addition, the probabilities of occurrence and results of the CSRD materiality analysis and the OpRisk scenario analysis are taken into account in the assessment.

Finally, a qualitative assessment by the relevant experts from the REF and Non-Core segments must also be submitted for the materiality assessment of the environmental factors, as the sector assessment cannot assess the Bank's explicit exposures in detail. This multi-stage assessment system revealed that the environmental factor of pollution/contamination is material for REF. The other factors mentioned were rated as immaterial. None of the risk factors mentioned were identified as material for Non-Core.

For the risk factors volcanism, earthquake and tsunami, the external loss expectations can be used for the REF segment via the location data of the properties.

For the Non-Core segment, the environmental factors volcanism and earthquakes were emphasised as part of the materiality analysis. In the event of earthquake or volcanic events, similar business interruption risks and reconstruction burdens arise, as do state subsidies or aid payments, as in the case of acute climate-related environmental events. This can permanently weaken or strain the debtor's creditworthiness. As with physical climate risks, the assessment is carried out in a three-stage process to determine the existence risk of other environmental risks, the calculation of the gross risk for the borrower, debtor or guarantor and the final reconciliation to the net risk for these parties.

Results of the materiality assessment

For the assessment of the materiality of ESG factors, pbb Group has summarised the following physical and transitory climate and environmental risks as well as social and governance factors and included them according to time horizon.

Materiality of ESG risk factors

Kind	Designation	Portfolio
Environmental **Physical risk: acute climate hazards**	Floods, storms (including cyclones, hurricanes, typhoons), tornadoes, forest fires, cold spells/freezes, landslides	REF / NC / C&A
	Heavy precipitation	
	heat waves, landsides	NC / C&A
	Drought	NC / C&A
Physical risk: chronic climate hazards	None	-
Physical risk: environmental factors	Environmental pollution/contamination	REF
	Earthquakes, volcanism	REF / NC / C&A
Transitory risk factors	Energy efficiency, carbon footprint (Scope 1,2,3 emissions)	REF / NC / C&A
	New sustainability and environmental regulations / carbon pricing	REF
	Market sentiment	
Social **risk factors**	None	-
Governance **risk factors**	Unethical corporate behaviour culture, supplier management/unethical supplier behaviour and payment practices, anti-competitive behaviour and political engagement or lobbying, corruption and bribery	-

[1)] Portfolio by business segment: Real Estate Finance (REF), Non-Core (NC) and Consolidation & Adjustments (C&A).

Effects on specific risk types

The physical and transitory risk factors recognised as material have an influence on the credit risk.

Some acute physical risk factors (heavy rainfall, storms and tornadoes) could, with a low probability and to a limited extent, lead to damage to property or disruptions to the bank's business continuity and are therefore relevant to operational risk alongside some governance factors. There is also a potential influence of transitory, environmental and governance factors on reputational, legal and liability risks as well as business and strategic risk. No direct sustainability risks are currently recognisable for pbb's market risk as well as liquidity and funding risk.

Based on the findings of the materiality analysis and the risk inventory, the impact of climatic risks was analysed using various scenarios:

- In order to systematically examine the potential vulnerability of pbb's portfolio and capital position with regard to medium-term transitory climate and environmental risks, a corresponding short-term transition scenario is defined, fully calculated and analysed within the normative and economic ICAAP perspective, and finally firmly integrated into the stress test programme.
- A combined long-term transition risk and chronic physical risk scenario was calculated in order to extend the focus to potential events that manifest themselves over a long-term period. In this scenario, the period up to 2050 was considered under various climate transition paths.
- The impact of acute physical risks was analysed in a dedicated scenario.

Specific models have been used to calculate the effects of the various stress scenarios for the banking business and to manage the risks recognised as a result, taking into account the climate-specific parameters. The results of the three climate risk scenarios have been taken into account in the ICAAP and ILAAP management groups.

These ESG risk factors have an impact on credit risk, operational risk including potential reputational, legal and liability risks, as well as on business and strategic risk. No direct sustainability risks are currently identifiable for pbb's market risk as well as liquidity and funding risk.

pbb has taken ESG risk factors into account in monitoring, reporting, stress tests and scenario analyses. The full integration of ESG factors in quantification as part of the ICAAP is in progress.

Social and corporate governance risks

As part of the expected further specification of regulatory requirements for the identification and management of external governance and social risks, pbb has started to analyse corresponding S and G sustainability criteria, where relevant for its business model. In order to be able to fulfil the corresponding disclosure obligations, a process has been established to review the client's compliance with the so-called "Minimum Social Safeguards" (MSS) in accordance with Article 18 of the EU Taxonomy.

pbb Group uses a workflow system (RWC) to efficiently organise appropriate, continuous legal monitoring. It enables comprehensive and early identification of innovations (or changes) with regard to relevant regulatory requirements and specifications. It also supports the definition of suitable measures to fulfil relevant regulations and requirements, their implementation and the corresponding monitoring of implementation. In the 2022 reporting year, a separate disclosure with regard to ESG standards was introduced in the workflow system.

The monitoring and management of social and corporate governance risks of counterparties focuses on the prevention of money laundering and terrorist financing, compliance with financial sanctions and embargoes as well as fraud prevention / prevention of other criminal offences, in particular the prevention of corruption. In this respect, pbb Group has taken appropriate precautions and issued various other internal guidelines, instructions and process descriptions in addition to the Code of Conduct. Proper compliance with these requirements is monitored by Compliance.

Risk management in business operations

From a risk perspective, the focus is on the opportunities to exert influence along the entire value chain of commercial property financing, starting with the procurement of funds, through the initiation of business and the entire loan management process, to the repayment or realisation of collateral. However, the focus is clearly on the topics of lending, risk assessment and the management of ESG risks in the portfolio.

ESG risks are managed at pbb Group in accordance with the "three lines of defence" (3 LoD) principle, with the risk owners (divisional heads) of the various specialist divisions which are particularly close to clients/public, forming the first line of defence. The 2nd line of defence is usually formed by the Risk Management & Control, Legal and Compliance departments with support functions from HR and IT. Group Internal Audit (GIA) represents the 3rd line of defence.

In new REF business, the e-scoring system developed by pbb is consistently applied with regard to the "green loan" concept (including analysing physical risks and offering a selection of products for specific purposes). The comparison of each property to be financed with the corresponding climate pathway (CRREM pathway) has been firmly established since April 2022 and supports the transformation of the portfolio towards alignment with the overarching Paris climate target. The declared aim is to achieve a new business volume of 32% of "green loan"-eligible assets in the REF portfolio in 2025 and more than 30% of "green loan"-eligible assets in the REF portfolio as a whole by 2026.

Deviations from the strategic guidelines require explicit approval from the Management Board in the lending decision process for new office property business. The commissioning of any mitigating measures (e.g. insurance, structural measures, etc.) with regard to (potential) physical e-risk is also a key component of the lending process.

E-scoring has been applied to a very large part of the existing business in the Real Estate portfolio in recent years due to extensive follow-up surveys of building data, creating the basis for long-term climate management. This is not planned for the existing business in the Non-Core and C&A segments.

ESG risk reporting

Specific risk indicators have been defined and assigned to the individual components for monitoring the various aspects of the Group's own ESG risk (inside-out perspective). Yellow and red thresholds have been defined for these risk indicators based on the traffic light system. The risk indicators are reported quarterly to the Risk Committee, the Management Board and the division heads as part of the key risk indicator (KRI) reporting for non-financial risks. Both the ESG risk indicators and the internal targets relating to the various aspects of ESG risk are continuously developed, expanded and specified.

The monitoring of environmental risk (outside-in perspective) currently focuses on the aspects of climate change mitigation and adaptation associated with the property properties we finance.

Monitoring of the exposure potentially affected by physical and transitory risks has been established in internal risk reporting for both the REF portfolio and the non-REF portfolio component. Internal reporting also provides additional transparency with information on E-related market risk sensitivities and ESG-related losses in the case of operational risk in the REF portfolio. Internal reporting is continuously expanded in line with the data situation. The quarterly KRI report contains portfolio information regarding transparency based on the total "scored" share and the share of the portfolio assessed as "green".

Corporate management

pbb Group has systematically integrated all three dimensions of ESG into its governance structures. The topics and processes are handled and implemented by the ESG programme until the content is successively integrated into the individual divisions.

The ESG programme comprises four projects and six overarching working groups with ESG topics that are particularly relevant for pbb (strategy, environment, social and governance as well as ESG risk, data management, communication and reporting). In 2021, pbb's entire Management Board set up the ESG Committee as a specialist committee for steering and monitoring, which is made up of the entire Management Board, the divisional heads, the members of ESG programme management and the project managers. It is primarily responsible for developing an ESG business and risk strategy and for monitoring the corresponding implementation measures, and generally meets every two months. A report on the progress of the programme is submitted to the Supervisory Board every six months. With the launch of the programme in 2021, the Management Board also appointed an ESG Programme Management, whose tasks are to support the ESG Committee and prepare the resolutions of the ESG Committee.

The ESG Office is part of the ESG programme. It is responsible for coordinating divisional tasks, long-term issue monitoring and supporting the ESG Committee.

Organisation of the ESG programme

The decentralised integration of ESG topics in the specialist divisions and core processes ensures that ESG topics are firmly anchored within pbb Group. Employees from different specialist divisions are trained as required - from general basic training to self-study modules (learning nuggets) available on a decentralised basis on the intranet, through to external ESG training courses for the targeted further training of ESG specialists in individual pbb specialist divisions. This is aimed in particular at tapping synergy effects in the context of ESG topic processing, ensuring a smooth transition from ESG tasks to regular processes and building up specialist ESG expertise in the divisions. To this end, a long-term ESG governance target has been developed, which pbb Group is endeavouring to achieve.

Remuneration

pbb Group promotes behaviour in relation to its climate, environmental and social risk approach as part of the variable remuneration component by linking the variable remuneration to the achievement of corresponding ESG targets.

To this end, pbb Group defines overarching strategic priorities for variable remuneration on an annual basis, in line with the requirements of the remuneration strategy, which are closely interlinked with the key institutional objectives and plans derived from the business and risk strategy ("Corporate Strategic Priorities"). The Management Board also sets corporate strategic priorities in the area of ESG (environment, social and governance). This serves in particular to promote behaviour in relation to pbb's climate, environmental and social risk approach. Divisional targets are defined on the basis of the Corporate Strategic Priorities, which are communicated to all employees in the division at the beginning of the year. At an individual level, a target agreement with qualitative and quantitative targets for the current financial year is concluded annually for each employee. The individual targets are based on the divisional targets and therefore also fundamentally on the Corporate Strategic Priorities. Divisional and, in many cases, individual targets include general qualitative ESG targets for the entire bank as well as individual ESG targets for specific divisions. The latter focus on the achievement of external and internal indicators, but also on the completion of key ESG projects such as ESG data or the implementation of CSRD.

The departmental and individual targets of the members of the Management Board also include quantitative and qualitative ESG targets. The targets for 2023 and new targets for 2024 reflect the topic-related short and medium-term ESG targets, including for the financing of properties classified as green, the overall ESG strategy for 2024 and the consideration and minimisation of ESG risks as part of the credit analysis and selection process. With the recruitment and promotion of young talent, retention and the promotion of diversity with a focus on the advancement of women, key social sustainability goals were once again placed in the spotlight.

Climate and environmental risk

This chapter shows the quantitative information in accordance with Article 449a CRR in relation to climate and environmental risks, in particular on transition risks from climate change (tables EU ESG1, EU ESG2, EU ESG3 and EU ESG4), on physical risks from climate change (EU ESG5), on risk mitigation measures associated with economic activities that are considered environmentally sustainable under the EU taxonomy (EU ESG6, EU ESG7 and EU ESG8), and on other climate change mitigation measures not covered by the EU taxonomy (EU ESG10).

Climate and environment - transition risks from climate change

EU ESG1: Banking book - indicators for potential transition risks from climate change: credit quality of risk positions by sector, emissions and residual maturity

The EU ESG1 table shows a breakdown of exposures (loans and credits, debt securities, equity instruments) to non-financial corporations operating in economic sectors (by NACE codes) that contribute significantly to climate change and are therefore more exposed to the risks that may arise from the transition to a low-carbon and climate-resilient economy (transition risks). The table also contains information on the quality of these risk positions and their maturity structure (remaining term). According to recital 6 of Delegated Regulation (EU) 2020/1818, economic sectors that contribute significantly to climate change include oil, gas, mining and transport. The data basis for the EU ESG1 table is the FINREP system (reporting of financial information in accordance with IFRS).

pbb Group uses the "Partnership for Carbon Accounting Financials" (PCAF) standard to determine the financed Scope 1, Scope 2 and Scope 3 emissions of counterparties (columns i, j and k). This aims to ensure that banks and other financial institutions disclose the greenhouse gas emissions that they finance through their loans and investments in a standardised form. Transparent disclosure of greenhouse gas emissions and reliable comparisons with other institutions should help to implement pbb Group's sustainability strategy. Greenhouse gases (GHG) can be divided into three categories in accordance with the Greenhouse Gas Protocol (GHG Protocol):

- Scope 1: Direct GHG emissions that arise from sources that are caused or controlled by the reporting company, i.e. that are generated locally within the company or by direct activities (e.g. by local combustion or heating plants or by emissions from the company's own vehicle fleet).
- Scope 2: Indirect GHG emissions that arise as a consequence of the company's activities but are not emitted by the reporting company (e.g. consumption of purchased electricity, purchased heat, etc.). These GHG emissions are physically produced by the suppliers where the electricity, heat, etc. is generated.
- Scope 3: Other indirect GHG emissions (which do not fall under Scope 2) that occur in the reporting company's value chain, but in activities outside the company. These emissions can be divided into upstream emissions (emissions in the life cycle of materials, products or services until they are sold) and downstream emissions (emissions from the distribution, storage, utilisation, treatment and use of products or services at the end of their life cycle).

The financed CO_2 emissions in tonnes of CO_2 equivalents (tCO_2 e) are calculated in accordance with the international standard for measuring CO_2 emissions from the Partnership for Carbon Accounting Financials (PCAF). The underlying PCAF calculation methodology for the Nace Sector L is based on the financial share of loan financing in a financed property and in the total emissions of the respective property.

In order to determine the financed issues, the Bank was able to use data provided by the counterparty for 67% of the total issues; 33% was estimated using PCAF proxies. The calculation models are currently still in a continuous development process, so that pbb Group will publish the financed emissions for the currently outstanding sectors (C, D, E, F, G, H and I) as well as for the differentiation of the financed Scope 3 emissions as of 30 June 2024.

In line with pbb Group's business model with its core business of commercial real estate finance, 96% of these exposures to non-financial companies are attributable to the economic sectors "L - Real Estate" (€ 29.7 billion, line 52) and "F - Construction" (€ 253 million, line 40). The share of the other economic sectors together amounts to around 4% and is individually less than 1% of the risk positions. pbb Group does not have any exposures to companies that are excluded from the Paris-aligned EU benchmarks (such as weapons, tobacco, coal and lignite, oil, gaseous fuels, etc.) in its portfolio (EU ESG1, column b).

EU ESG1: Investment book - indicators for potential transition risks from climate change: credit quality of risk positions by sector, emissions and residual maturity

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Gross carrying amount [2]					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tonnes of CO2 equivalent) [5]		GHG emissions (column i) [6]	Remaining maturity				
	Sector/subsector [1]		thereof exposures towards companies excluded from EU Paris-aligned benchm. [3]	thereof environmentally sustainable (CCM) [4]	thereof stage 2 exposures	of which non-performing exposures		thereof Stage 2 exposures	of which non-performing exposures		thereof Scope 3 financed emissions		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
	All figures in € million, unless otherwise stated																
1	**Exposures towards sectors that highly contribute to climate change***	**30,453**	**0**	**0**	**6,020**	**1,540**	**-557**	**-116**	**-404**	**248,862**	**-**	**1**	**25,270**	**4,195**	**880**	**107**	**3**
2	A - Agriculture, forestry and fishing	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
3	B - Mining and quarrying	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
4	B.05 - Mining of coal and lignite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	B.06 - Extraction of crude petroleum and natural gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	B.07 - Mining of metal ores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	B.08 - Other mining and quarrying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	B.09 - Mining support service activities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	C - Manufacturing	47	0	0	0	0	0	0	0	0	-	0	0	47	0	0	8
10	C.10 - Manufacture of food products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	C.11 - Manufacture of beverages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	C.12 - Manufacture of tobacco products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	C.13 - Manufacture of textiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	C.14 - Manufacture of wearing apparel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	C.15 - Manufacture of leather and related products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	C.16 - Manufacture of wood and of products of wood and cork, manufacture of articles of straw and plaiting materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	C.17 - Manufacture of pulp, paper and paperboard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	C.18 - Printing and service activities related to printing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	C.19 - Manufacture of coke oven products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	C.20 - Production of chemicals	47	-	-	-	-	-	-	-	-	-	-	-	47	-	-	8
21	C.21 - Manufacture of pharmaceutical preparations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	C.22 - Manufacture of rubber products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Gross carrying amount [2]					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tonnes of CO2 equivalent) [5]		GHG emissions (column i) [6]	Remaining maturity				
	Sector/subsector [1]		thereof exposures towards companies excluded from EU Paris-aligned benchmarks [3]	thereof environmentally sustainable (CCM) [4]	thereof stage 2 exposures	of which non-performing exposures		thereof Stage 2 exposures	of which non-performing exposures		thereof Scope 3 financed emissions		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
	All figures in € million, unless otherwise stated																
23	C.23 - Manufacture of other non-metallic mineral products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	C.24 - Manufacture of basic metals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	C.25 - Manufacture of fabricated metal products, except machinery and equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	C.26 - Manufacture of computer, electronic and optical products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	C.27 - Manufacture of electrical equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	C.28 - Manufacture of machinery and equipment n.e.c.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	C.29 - Manufacture of motor vehicles, trailers and semi-trailers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	C.30 - Manufacture of other transport equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	C.31 - Manufacture of furniture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	C.32 - Other manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	C.33 - Repair and installation of machinery and equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	D - Electricity, gas, steam and air conditioning supply	26	0	0	0	0	0	0	0	0	-	0	4	22	0	0	6
35	D35.1 - Electric power generation, transmission and distribution	26	-	-	-	-	-	-	-	-	-	-	4	22	-	-	6
36	D35.11 - Production of electricity	26	-	-	-	-	-	-	-	-	-	-	4	22	-	-	6
37	D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	D35.3 - Steam and air conditioning supply	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	E - Water supply; sewerage, waste management and remediation activities	100	0	0	0	0	0	0	0	0	-	0	50	50	0	0	6
40	F - Construction	253	0	0	107	0	0	0	0	0	-	0	217	36	0	0	2
41	F.41 - Construction of buildings	253	-	-	107	-	-	-	-	-	-	-	217	36	-	-	2
42	F.42 - Civil engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	F.43 - Specialised construction activities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
44	G - Wholesale and retail trade; repair of motor vehicles and mo-	100	0	0	0	0	0	0	0	0	-	0	100	0	0	0	0

	Sector/subsector [1]	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
	torbikes																
		Gross carrying amount [2]					**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**			**GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tonnes of CO2 equivalent) [5]**		**GHG emissions (column i) [6]**	**Remaining maturity**				
			thereof exposures towards companies excluded from EU Paris-aligned benchmarks [3]	**thereof environmentally sustainable (CCM) [4]**	**thereof stage 2 exposures**	**of which non-performing exposures**		**thereof Stage 2 exposures**	**of which non-performing exposures**		**thereof Scope 3 financed emissions**		**<= 5 years**	**> 5 year <= 10 years**	**> 10 year <= 20 years**	**> 20 years**	**Average weighted maturity**
	All figures in € million, unless otherwise stated																
45	H - Transportation and storage	54	0	0	28	19	-1	-1	-1	0	-	0	47	0	7	0	5
46	H.49 - Land transport and transport via pipelines	27	-	-	-	19	-1	-	-1	-	-	-	20	-	7	-	6
47	H.50 - Water transport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	H.51 - Air transport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	H.52 - Warehousing and support activities for transportation	28	-	-	28	-	-1	-1	-	-	-	-	28	-	-	-	5
50	H.53 - Postal and courier activities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	I - Accommodation and food service activities	180	0	0	41	-	-2	-2	-	-	-	-	1	179	-	-	6
52	L - Real estate activities	29,693	0	0	5,844	1,520	-554	-113	-403	248,862	-	1	24,851	3,862	873	107	3
53	**Exposures towards sectors other than those that highly contribute to climate change***	**705**	**0**	**103**	**80**	**0**	**0**	**0**	**0**	---	---	---	**170**	**80**	**328**	**127**	**13**
54	K - Financial and insurance activities [7]	-	-	-	-	-	-	-	-	---	---	---	-	-	-	-	-
55	Exposures to other sectors (NACE codes J, M - U)	705	-	103	80	-	-	-	-	---	---	---	170	80	328	127	13
56	**Total**	**31,158**	**0**	**103**	**6,100**	**1,540**	**-558**	**-116**	**-404**	**249,303**	**-**	**1**	**25,440**	**4,275**	**1,208**	**234**	**3**

[1] The classification according to the NACE code of the counterparty is based on the main business activity of the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or that of the most significant or decisive debtor. The NACE codes correspond to the NACE Regulation: Statistical Classification of Economic Activities in the European Community.

[2] Gross carrying amount - before deduction of impairment losses on financial assets, after write-downs, before application of credit risk mitigation techniques - of loans and advances, debt securities and equity instruments in the banking book, i.e. excluding financial assets held for trading or held for sale.

[3] Exposures to entities excluded from Paris-aligned EU benchmarks in accordance with Article 12(1)(d) to (g) and Article 12(2) of Regulation (EU) 2020/1818.

[4] Column c: According to EBA/ITS/2022/01, institutions should start disclosing this information on the disclosure dates of 31 December 2023 (for exposures included in the numerator of the Green Asset Ratio (GAR)) and 31 December 2024 (for exposures included in the numerator of the Banking Book Taxonomy Alignment Ratio (BTAR) but not in the numerator of the GAR), if this data is not yet available.

[5] Columns i to k: According to EBA/ITS/2022/01, if this data is not yet available, institutions should start disclosing this information on the disclosure date of 30 June 2024.

[6] Greenhouse gas emissions (GHG). Column k shows the percentage of the portfolio for which information on scope 1/2/3 emissions of the counterparties is already available.

[7] Line 54 (Sector K) contains the risk positions vis-à-vis non-financial corporations (according to FINREP); risk positions vis-à-vis credit institutions and other financial corporations, however, are not included.

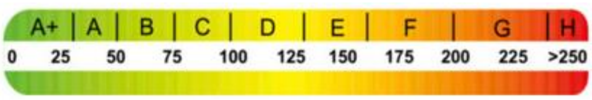
EU ESG2: Investment book - Indicators for potential transition risks from climate change: Loans collateralised by real estate - Energy efficiency of collateral

The EU ESG2 table shows the risk of transition from climate change (transition risk) as a result of adjustments to a lower-carbon and more environmentally sustainable economy for loans and credits collateralised by commercial and residential properties and for repossessed property collateral. The energy efficiency of commercial and residential properties is presented on the basis of the specific energy consumption (in kWh/m^2) or the EPC label (Energy Performance Certificate, EPC) of the underlying property collateral. The risk positions are broken down according to the geographical location in which the property collateral is located (EU and non-EU).

In pbb Group's commercial real estate finance, the portfolio continues to be dominated by investment finance. This category comprises the financing of properties whose debt servicing capacity is essentially derived from current property cash flows. The properties financed are mainly office buildings, residential properties, retail properties and logistics properties. Of the risk positions shown in table EU ESG2, i.e. loans and credits collateralised by properties, 82% are attributable to commercial properties and 18% to residential properties. Geographically, pbb Group's focus is on Europe and the USA. The main core markets in Europe are Germany, France, the United Kingdom, the Nordic countries, individual Central and Eastern European countries, Spain and Benelux. In the USA, pbb concentrates in particular on the metropolitan regions of New York, Washington D.C., Boston, Chicago, San Francisco, Seattle and Los Angeles. Accordingly, 77% of the risk positions are attributable to EU countries and 23% to non-EU countries.

The general data basis for the EU ESG2 table is the FINREP system (reporting of financial information in accordance with IFRS). For the information on the energy efficiency of the properties, a final energy consumption (in kWh/m^2) was also assigned to each property ID. EU ESG2 (columns h to n) therefore shows the risk items for which an EPC label (Energy Performance Certificate) is available for the property collateral. The categories with EPC labels A/A+ are summarised in label A and those with EPC labels G/H in label G. The information on the final energy consumption (kWh/m^2) of the properties according to the EPC label is used to categorise the risk positions according to the Energy Performance Score (EPS; columns b to g). If no information on final energy consumption was available, the properties were assigned an estimated final energy consumption based on property type and year of construction. Lines 5 and 10 show the extent to which the energy efficiency was estimated in the absence of an available EPC label versus final energy consumption. The methodology used to estimate the final energy consumption (kWh/m^2) and the statistical data sources used are described below.

Each residential property with a known EPC label has been assigned to an EPC range based on the German EPC classification for residential buildings. Information on the final energy consumption per year in kWh/m^2 is also available for each residential property with a known EPC label. There is no scale with uniform standards for energy efficiency labels for commercial properties in Germany. However, the final energy consumption (kWh/m^2) is known if the Energy Performance Score (i.e. the energy efficiency in kWh/m^2) is known. The relationship between the Energy Performance Score and the EPC label corresponds to the classification scale for German residential buildings shown below.



German EPC classification scale for residential buildings in kWh/m^2
(Energy efficiency for residential buildings - fuel consumption in kilowatt hours per square metre and year (abbreviated: kWh/m^2 a).

The average final energy consumption for residential buildings has fallen steadily with the younger the year of construction, as the following table shows. The statistical average values form the basis for the estimation function of final energy consumption by year of construction.

Construction year	Primary energy demand in kWh/m ²	Final energy demand in kWh/m²	Final energy consumption in kWh/m²
1918 - 1934	260	225	150
1935 - 1947	265	230	150
1948 - 1949	255	205	150
1950 - 1959	255	205	145
1960 - 1977	240	180	145
1978 - 1989	220	165	140
1990 - 1999	165	125	125
2000	125	100	125
2001	125	100	100
2002 - 2003	100	95	80
2004	95	80	80
2005	90	80	80
2006 - 2007	80	70	75
2008	75	70	75
2009 - 2027	55	50	75

Average final energy consumption by year of construction. Source: https://www.dena.de/fileadmin/user_upload/8162_dena-Gebaeudereport.pdf
The source only applies to residential buildings. Proxies were assigned to the other property types using property type-dependent scaling.

The average final energy consumption, which varies with the building category, is also taken into account. The following table shows the statistically recorded categories and the scaling factor relative to the residential building category. The estimated final energy consumption for properties without a recorded Energy Performance Score therefore corresponds to the mean value depending on the year of construction in accordance with the estimation function multiplied by the property type-dependent scaling factor.

Building category	Energy consumption p.a. (electricity) in kWh/m²	Energy consumption p.a. (heating) in kWh/m²	Total energy consumption in kWh/m²	Scaling factor total
Hotel	60	95	155	1.14
Retail	85	70	155	1.14
Office	85	110	195	1.43
Logistics	35	30	65	0.48
Residential	34	102	136	1.00

Average final energy consumption by property type according to the following sources for non-residential buildings (https://geg-info.de/geg/210503_bmwi_bmi_regeln_energieverbrauchskennwerte_nichtwohnbestand.pdf) and residential buildings (https://www.bmwk.de/Redaktion/DE/Downloads/Studien/vorbereitende-untersuchungen-zur-langfristigen-renovierungsstrategie-ergaenzung.pdf?__blob=publicationFile&v=6).

Reporting on the energy efficiency of the financed properties is an integral part of pbb Group's regular internal reporting to management.

EU ESG2: Investment book - Indicators for potential transition risks from climate change: Loans collateralised by real estate - Energy efficiency of collateral

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Total gross carrying amount [1]															
			Level of energy efficiency[2] (EP score in kWh/m² of collateral)						**Level of energy efficiency (EPC label of collateral) [3]**							**Without EPC label of collateral**	
	Counterparty sector		**0 ; <= 100**	**> 100; <= 200**	**> 200; <= 300**	**> 300; <= 400**	**> 400; <= 500**	**> 500**	**A**	**B**	**C**	**D**	**E**	**F**	**G**		**Thereof level of energy efficien-cy esti-mated [4]**
All figures in € million, unless otherwise stated																	
1	**Total EU area**	**23,667**	**8,185**	**11,821**	**2,443**	**915**	**180**	**123**	**820**	**1,239**	**1,081**	**1,165**	**445**	**316**	**631**	**17,969**	**36%**
2	of which loans collateralised by commercial immov-able property	19,128	6,892	8,669	2,358	906	180	123	752	887	795	805	305	191	586	14,806	31%
3	of which loans collateralised by residential immova-ble property	4,539	1,292	3,153	85	9	-	-	68	351	286	360	140	125	45	3,163	60%
4	thereof Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	thereof Level of energy efficiency (EP score in kWh/m² of collateral) estimated	6,555	1,706	4,845	4	-	-	-	---	---	---	---	---	---	---	6,555	100%
6	**Total non-EU area**	**7,007**	**1,050**	**4,056**	**861**	**480**	**166**	**395**	**368**	**1,183**	**242**	**225**	**98**	**-**	**-**	**4,891**	**61%**
7	of which loans collateralised by commercial immov-able property	6,156	878	3,484	795	437	166	395	368	958	242	225	98	-	-	4,265	58%
8	of which loans collateralised by residential immova-ble property	851	171	571	66	43	-	-	-	225	-	-	-	-	-	626	83%
9	thereof Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	thereof Level of energy efficiency (EP score in kWh/m² of collateral) estimated	3,231	345	2,886	-	-	-	-	---	---	---	---	---	---	---	3,000	100%

[1] Gross carrying amount of loans and credits collateralised by real estate, before deduction of impairments on financial assets, but after write-downs, before application of credit risk mitigation techniques.
[2] Columns b to g: Risk positions by energy efficiency class based on the specific energy consumption (in kWh/m^2) of the collateral.
[3] Columns h to n: Risk positions by energy performance certificate class (EPC label) of the collateral, for those collaterals for which pbb Group has an energy performance certificate (EPC).
[4] Column p: Percentage of receivables from column o (according to EBA-Q&A 2022-6625) for which the energy efficiency level (EPS of collateral in kWh/m²) was estimated.

EU ESG3: Investment book - Indicators for potential transition risks from climate change: alignment parameters

The EU ESG3 table contains information on pbb Group's sustainability efforts for certain economic sectors (by IEA sectors and NACE sectors) in order to harmonise with the goals of the Paris Climate Agreement. The information refers to the "Net Zero Emissions by 2050 Scenario" (NZE2050 Scenario) of the International Energy Agency (IEA) and shows the alignment parameters used by pbb Group, the deviation from the climate pathway and the targets per relevant economic sector. The EU ESG3 includes the risk positions (loans and credits, debt securities, equity instruments) vis-à-vis non-financial corporations. The data is based on the FINREP system (reporting of financial information in accordance with IFRS).

pbb Group is currently developing a climate pathway with the aim of actively steering the REF portfolio towards CO_2 reduction. pbb Group's climate pathway is geared towards limiting global warming to 1.5 degrees Celsius, calculated from the pre-industrial age to the year 2050. The precise intermediate steps towards this target are still being developed.

The EU ESG3 table contains the alignment metric for the real estate sector (Nace sector L - 68) as at 31 December 2023. pbb Group uses the international PCAF standard for the calculation of financed emissions in the financial sector to determine emission intensities. The issue data for the financed real estate properties is calculated using the issue data provided by the counterparties and, in the case of missing information, by using PCAF proxies. In deviation from the requirements of Implementing Regulation (EU) 2022/2453, the climate pathway according to the Carbon Risk Real Estate Monitor (CRREM) Global Pathways is used for the real estate sector instead of the IEA's "NZE2050" climate pathway. This deviation was made because the CRREM climate pathway is more suitable for the property financing sector, which dominates pbb Group, due to the differentiated consideration of the country and the intended use of the property. The IEA NZE 2050, on the other hand, provides for a single global pathway.

The models for the "Electricity" and "Maritime transport" sectors will be further developed and the deviations from the climate pathway as at 30 June 2024 will be disclosed. In addition, the 3-year targets are currently being finalised and will also be published in the 2024 half-year report.

EU ESG3: Investment book - Indicators for potential transition risks from climate change: alignment parameters

	a	b	c	d	e	f	g
All figures in € million, unless otherwise stated	**IEA Sectors [1)]**	**NACE Sectors [2)] (a minima)**	**Gross carrying amount of the portfolio [3)]**	**Alignment metric [4)]**	**Year of reference [5)]**	**Distance to IEA scenario NZE2050 [6)] (in %)**	**Target [7)] (year of reference + 3 years)**
1	Real estate activities	68	29,693	tCO2/m2	2023	201%	-

[1)] Industry Sectors of the International Energy Agency (IEA).

[2)] Economic activities according to the NACE Regulation (EU), the Statistical Classification of Economic Activities in the European Community (Nomenclature Générale des Activités Économiques dans les Communautés Européennes, NACE;).
The classification according to the NACE code of the counterparty is based on the main business activity of the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or that of the most significant or decisive debtor.

[3)] Gross carrying amount - before deduction of impairment losses on financial assets, after write-downs, before application of credit risk mitigation techniques - of loans and advances, debt securities and equity instruments in the banking book, i.e. excluding financial assets held for trading or held for sale.

[4)] Harmonisation parameters with regard to the IEA's "Net Zero Emissions by 2050 Scenario" (NZE2050).

[5)] Reference year for measuring the harmonisation parameters of the respective sector.

[6)] Time gap between the alignment parameters (in %) and the data points of the "Net Zero Emissions by 2050 Scenario" (NZE2050) applicable for 2030. In this respect, the gap corresponds to the degree of alignment with the scenario indicators for 2030 according to the IEA report "Net Zero Emissions by 2050: A Roadmap for the Global Energy Sector" (Update 2023). For NACE Sector L, pbb Group uses the CRREM path.

[7)] Target of pbb Group for 3 years in relation to the reference year (column e) and with regard to the alignment parameters (column d).

EU ESG4: Investment book - indicators for potential transition risks from climate change: risk positions towards the 20 most CO_2 -intensive companies

The EU ESG4 table is not relevant for pbb Group. As of the disclosure date, pbb Group has no exposures to the 20 most carbon-intensive companies worldwide. The publicly accessible Carbon Majors Database was used to identify the most carbon-intensive companies (Climate Accountability Institute: https://climateaccountability.org/carbon-majors/).

Climate and environment - Physical risk

EU ESG5: Investment book - indicators for potential physical risks from climate change: exposures with physical risk

The EU ESG5 table contains information on exposures (loans and credits, debt securities and equity instruments) to non-financial corporations, loans collateralised by real estate and repossessed real estate collateral that may be exposed to physical risk (chronic and acute hazards) from climate change. The table also contains information on the credit quality and maturity structure/remaining term of these risk positions. In accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the counterparties are broken down by economic sector (according to NACE codes) and geographical area. As geographical areas which may be susceptible to certain climate-related risks, pbb Group shows the table for Germany as well as summarised for all other countries.

Germany alone accounts for around 31% of these risk exposures to non-financial corporations, 98% of which relate to the economic sectors "L - Real estate and housing" and "F - Construction". The other countries (excluding Germany) account for around 69% of the risk positions, 95% of which are in the economic sectors "L - Real estate and housing" and "F - Construction".

There are no risk positions in Germany that are only susceptible to the effects of chronic events as a result of climate change; in the other countries, these amount to € 36 million. A physical risk is classified as chronic if it is the result of gradual changes (such as rising sea levels). A physical risk is classified as acute if it arises as a result of extreme events (such as droughts, floods and storms). The risk positions that are only susceptible to the effects of acute events due to climate change amount to € 661 million in Germany, which is 7% of the risk positions attributable to Germany, and € 7,582 million in the other countries combined, which corresponds to 35% of the risk positions attributable to these countries. The risk positions that are susceptible to the effects of both chronic and acute events as a result of climate change amount to € 10 million or 0.1% of the risk positions attributable to Germany and € 149 million or 0.7% of the risk positions attributable to these countries in the other countries combined.

The general data basis for the EU ESG5 table is the FINREP system (reporting of financial information in accordance with IFRS). The methodology used to assess the sensitivity to physical events due to climate change and the data sources used are described below. For collateralised financing, the sensitivity analysis takes into account the risk assessment of the collateral (commercial and residential properties). For uncollateralised financing, on the other hand, the counterparty and the counterparty's area of activity are used for the assessment.

The physical risk assessments for collateralised financing are available at property level. The risk assessment for a (chronic and/or acute) physical risk of the associated contracts is derived directly from the most risky property assigned to the contract. The physical risk assessments for unsecured financing are carried out on the basis of the business partner. The risk assessment of financing is derived from the postcode of the business partner's head office. The classification of territorial units for statistics (Nomenclature des Unités territoriales statistiques; NUTS) was used.

The results of the physical risk assessment of pbb Group's risk inventory were used to determine the sensitivity of financings to the risks of climate change. pbb carries out a comprehensive risk inventory at least once a year in order to systematically identify and analyse potential risks which may result from the business model or the external environment of pbb Group. The objective of the risk inventory is to determine the complete risk profile, in which all risks are identified, assessed with regard to their materiality for the capital and liquidity resources and analysed for possible risk concentrations. An identification and assessment process for ESG risk drivers has been established as an integral part of the annual risk inventory in order to ensure that ESG risk is adequately taken into account in the risk management processes.

As part of the risk assessment in the risk inventory, each property was assigned a qualitative risk level on a risk scale ("risk traffic light") for ten acute (flood, heavy rain, storm surge, storm, tornado, hail, drought, forest fire, heat, landslide) and two chronic (coastal erosion, sea level rise) climate risks. The traffic light scales for most of these risks are defined by the external sources used (K.A.R.L. data, ThinkHazard, WRI Aqueduct). The climate risks from wildfires and landslides are an exception; these were reviewed by pbb using expert estimates and supplemented by analysing the vegetation and the elevation profile. As a result, pbb's assessment fully covers the physical climate risks listed as examples in the Delegated Regulation (EU) 2022/2453.

The distinction between acute and chronic risks is based, among other things, on the EBA report "Report on management and supervision of ESG risks for credit institutions and investment firms" (EBA/REP/2021/18). If the risk for an asset or a counterparty was rated with the second-highest level for at least one of the acute risks considered, this asset was labelled as sensitive to acute physical risks. The same applies to chronic physical risks. Due to the very conservative approach chosen, the disclosure in Table EU ESG5 can be seen as the upper limit of risk for pbb Group. In addition, the assessment is to be considered as a gross view, i.e. before any risk mitigation techniques and individual climate analyses (e.g. through insurance and/or the possibility of structural measures on the borrower side and through possible changes in contractual conditions or special due diligence on the bank side).

The risk assessments for flood, heavy rain, storm surge, storm, tornado and hail were carried out on the basis of K.A.R.L. data (Köln.Assekuranz Risiko Lösungen). K.A.R.L. offers an analysis tool for the location-specific and property-related identification and calculation of risks caused by natural hazards. To assess the risk situation, K.A.R.L. combines the location-specific hazard situation with the resilience (vulnerability) of the object under investigation (e.g. property, industrial location) using an object type-specific damage function. The EU ESG5 table was thus filled with the expected annual damage amounts, which were translated into a risk traffic light based on the K.A.R.L. scale in a five-stage qualitative assessment of the risk situations at the location.

Risk	**Lower barrier in %**	**Upper barrier in %**
No risk	-	0.00
Very low risk	0.00	0.05
Low risk	0.05	0.10
Medium risk	0.10	0.70
High risk	0.70	-

Risk assessment per property based on the expected damage in % for the physical risks covered by K.A.R.L.

The risks of drought, forest fire, heat, landslide, sea level rise and coastal erosion were assessed using publicly available hazard maps from ThinkHazard (a World Bank project) and WRI Aqueduct (standard setter of the "greenhouse gas protocol"). The assessment fully follows the method defined by ThinkHazard, with the threshold values developed there for the traffic light scale. For risks not assessed by ThinkHazard, the ThinkHazard thresholds were transferred via expert estimates (coastal erosion, sea level rise).

For the risk assessment of geographical territorial units, the classification of territorial units for statistics (Nomenclature des Unités territoriales statistiques; NUTS) was used as well as the European Union's categorisation of EU regions. For non-European areas, the area was approximated using a geocoordinate together with a realistic impact radius.

EU ESG5: Investment book - Indicators for potential physical risks from climate change: Exposures with physical risk (Germany)

	Variable: Geographical area subject to climate change physical risk - acute and chronic events [2) 3)] Germany	a	b	c	d	e	f	g	h	i	j	k	l	m	n
		Gross carrying amount [1)]													
			thereof exposures sensitive to impact from climate change physical events												
			Breakdown by maturity bucket					thereof exposures sensitive to impact from chronic climate change events	thereof exposures sensitive to impact from acute climate change events	thereof exposures sensitive to impact both from chronic and acute climate change events	thereof Stage 2 exposures	of which non-performing exposures	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
	All figures in € million, unless otherwise stated		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years [4)]	Average weighted maturity							thereof Stage 2 exposures	of which non-performing exposures
1	A - Agriculture, forestry and fishing	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	B - Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	C - Manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	D - Electricity, gas, steam and air conditioning supply	4	1	3	-	-	5	-	4	-	-	-	-	-	-
5	E - Water supply; sewerage, waste management and remediation activities	40	40	-	-	-	1	-	40	-	-	-	-	-	-
6	F - Construction	253	-	-	-	-	3	-	-	-	-	-	-	-	-
7	G - Wholesale and retail trade; repair of motor vehicles and motorbikes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	H - Transportation and storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	L - Real estate activities	9,242	314	208	10	11	5	-	533	10	4	-	-	-	-
10	Loans collateralised by residential immovable property	3,482	99	8	5	6	5	-	109	10	2	-	-	-	-
11	Loans collateralised by commercial immovable property	6,043	213	189	3	4	5	-	410	-	2	-	-	-	-
12	Repossessed colalterals	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Other relevant sectors (breakdown below where relevant)	129	3	-	81	-	12	-	84	-	-	-	-	-	-

[1)] Gross carrying amount - before deduction of impairment losses on financial assets, after write-downs, before application of credit risk mitigation techniques - of loans and advances, debt securities and equity instruments in the banking book, i.e. excluding financial assets held for trading or held for sale.

[2)] The classification according to the NACE code of the counterparty is based on the main business activity of the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or that of the most significant or decisive debtor. The NACE codes correspond to the NACE Regulation: Statistical Classification of Economic Activities in the European Community.

[3)] The allocation to a geographical area that may be exposed to a physical risk (chronic and acute risks) from climate change is based on the location of the debtor, i.e. the debtor's usual place of residence or the location of the assets (real estate) in the case of specialised lending.

[4)] In accordance with EBA/ITS/2022/01, the maturity band "> 20 years" may also include exposures that do not have a fixed residual maturity for reasons other than the counterparty being able to choose the repayment date.

EU ESG5: Investment book - Indicators for potential physical risks from climate change: Exposures with physical risk (other countries)

	Variable: Geographical area subject to climate change physical risk - acute and chronic events [2) 3)] Other countries (without Germany) All figures in € million, unless otherwise stated	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount [1)]													
			thereof exposures sensitive to impact from climate change physical events												
			Breakdown by maturity bucket					thereof exposures sensitive to impact from chronic climate change events	thereof exposures sensitive to impact from acute climate change events	thereof exposures sensitive to impact both from chronic and acute climate change events	thereof Stage 2 exposures	of which non-performing exposures	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
			<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years [4)]	Average weighted maturity							thereof Stage 2 exposures	of which non-performing exposures
1	A - Agriculture, forestry and fishing	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	B - Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	C - Manufacturing	47	-	47	-	-	8	-	47	-	-	-	-	-	-
4	D - Electricity, gas, steam and air conditioning supply	22	3	19	-	-	6	-	22	-	-	-	-	-	-
5	E - Water supply; sewerage, waste management and remediation activities	60	10	50	-	-	9	-	60	-	-	-	-	-	-
6	F - Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	G - Wholesale and retail trade; repair of motor vehicles and motorbikes	100	100	-	-	-	0	-	100	-	-	-	-	-	-
8	H - Transportation and storage	54	47	-	7	-	5	-	54	-	28	19	1	1	1
9	L - Real estate activities	20,451	6,404	301	162	-	2	36	6,682	149	3,124	768	377	86	285
10	Loans collateralised by residential immovable property	1,861	813	22	-	-	2	-	831	4	672	-	14	14	-
11	Loans collateralised by commercial immovable property	18,494	5,573	274	-	-	2	36	5,666	145	2,446	767	362	73	284
12	Repossessed collaterals	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Other relevant sectors (breakdown below where relevant)	756	137	124	247	110	12	-	617	-	80	-	-	-	-

[1)] Gross carrying amount - before deduction of impairment losses on financial assets, after write-downs, before application of credit risk mitigation techniques - of loans and advances, debt securities and equity instruments in the banking book, i.e. excluding financial assets held for trading or held for sale.
[2)] The classification according to the NACE code of the counterparty is based on the main business activity of the direct counterparty (such as the direct borrower, counterparty or issuer of the securities) or that of the most significant or decisive debtor. The NACE codes correspond to the NACE Regulation: Statistical Classification of Economic Activities in the European Community.
[3)] The allocation to a geographical area that may be exposed to a physical risk (chronic and acute risks) from climate change is based on the location of the debtor, i.e. the debtor's usual place of residence or the location of the assets (real estate) in the case of specialised lending.
[4)] In accordance with EBA/ITS/2022/01, the maturity band "> 20 years" may also include exposures that do not have a fixed residual maturity for reasons other than the counterparty being able to choose the repayment date.

Climate and environment - Green Asset Ratio (GAR)

In December 2019, the European Commission presented the EU Green Deal. The European Union is to become climate-neutral by 2050 by reducing net greenhouse gas emissions to zero. A central component for achieving the climate targets is the EU Taxonomy Regulation (Regulation (EU) 2020/852 / EU Taxonomy Regulation), which has been in force since July 2020 and creates a system for classifying sustainable economic activities, including for the environmental targets 1 Climate Action and 2 Adaptation to Climate Change. For these environmental objectives, pbb Group provides information on the taxonomy eligibility and taxonomy conformity of its risk positions in the following tables EU ESG6 to EU ESG8, as well as on the key performance indicator Green Asset Ratio (GAR).

Taxonomy-enabled economic activities

An economic activity is considered taxonomy-eligible in accordance with Article 1 No. 5 DelVO 2021/2178 if it is defined in the Annexes to DelVO 2021/2139, DelVO 2022/1214, DelVO 2023/2485 or DelVO 2023/2486, regardless of whether this economic activity actually fulfils technical assessment criteria.

Taxonomy-compliant economic activities

According to Article 1 No. 2 of the EU Taxonomy Regulation 2021/2178, an economic activity is taxonomy-compliant if it is environmentally sustainable within the meaning of Article 3 of the EU Taxonomy Regulation. So-called "technical screening criteria" must be met for this. An economic activity must make a significant contribution to the realisation of one or more of the six environmental objectives. However, the activity must not significantly harm any other environmental objective (also known as the "do no significant harm (DNSH)" criterion). Finally, minimum (social) protection standards for human rights including labour rights, corruption, taxation and fair competition must be complied with at counterparty level ("minimum safeguards").

As a credit institution, pbb is obliged to further categorise the taxonomy-compliant assets and to report them as a partial amount in the standardised reporting/disclosure forms:

- For all environmental objectives, the portion of assets in enabling activities must be recognised in accordance with Article 16 of the EU Taxonomy Regulation. An enabling economic activity exists if it directly enables other economic activities to make a significant contribution to one or more environmental objectives and fulfils certain conditions.

- For environmental objective 1 Climate action, the partial amount of assets in transitional activities within the meaning of Article 10 (2) of the EU Taxonomy Regulation must also be reported: $_2$A transition activity is defined as an activity for which there is no technologically and economically feasible low-carbon alternative, but which makes a significant contribution to climate protection if it supports the transition to a climate-neutral economy, in line with the pathway towards limiting the temperature increase to 1.5 °C above pre-industrial levels, including through the phasing out of greenhouse gas emissions, in particular from solid fossil fuels, and if this economic activity fulfils certain conditions.

Green asset ratio

The GAR is calculated from the ratio of on-balance sheet risk positions that finance taxonomy-compliant economic activities to the total assets of the credit institution - excluding defined deduction items. The counterparty's key performance indicators (KPIs) for taxonomy-compliant turnover and taxonomy-compliant capital expenditure (CapEx) are used to determine the taxonomy eligibility and compliance of assets with counterparties that do not serve to finance certain defined activities of the EU Taxonomy Regulation. A green asset ratio based on turnover and a green asset ratio based on CapEx must therefore be recognised. When defining the volume of new business (in connection with inflows as KPIs), pbb Group is guided by the criteria for initial recognition in accordance with IFRS 9.3.1.1.

EU taxonomy for pbb Group

pbb Group takes into account the requirements of the EU Taxonomy Regulation as part of its business strategy and discloses the reporting obligations as part of the summarised non-financial reporting, published on pbb's website under Investors / Financial Reports and other publications. The corresponding Pillar 3 disclosure requirements are shown in this Disclosure Report in accordance with Article 434 (1) CRR. It should be noted for both reports that, due to the nature of pbb Group's business activities, there are already restrictions when assessing the taxonomy of economic activities. These are reflected in particular in the determination and the amount of the GAR of pbb Group. In addition, the requirements regarding the reporting/disclosure obligations are subject to room for interpretation.

Green Asset Ratio of pbb Group

The eligibility of taxonomy-eligible and taxonomy-compliant economic activities for the purpose of determining pbb Group's GAR depends on the type of counterparty. A distinction is made between non-financial companies, financial companies, private and public households.

> Non-financial companies

  As a rule, assets vis-à-vis non-financial companies can only be taxonomy-eligible if the counterparty itself is obliged to report in accordance with Article 19a or 29a of Directive 2013/34/EU in conjunction with Directive 2014/95/EU (Non Financial Reporting Directive, NFRD). Directive 2014/95/EU (Non Financial Reporting Directive, NFRD) and is therefore obliged to report in accordance with the EU Taxonomy Regulation. In particular, this does not apply to small and medium-sized enterprises with fewer than 500 employees, to clients domiciled outside the EU and to non-capital-market-oriented companies. The majority of pbb Group's borrowers are national and international companies operating in the commercial real estate finance business, which arrange their real estate financing via special purpose vehicles (SPVs). These clients largely do not fulfil the criteria of the NFRD obligation, particularly due to their lack of size and capital market orientation. The companies behind the SPVs also do not fulfil the NFRD obligation. Accordingly, assets totalling € 31.4 billion are not included in pbb Group's GAR.

  In the case of assets to non-financial companies subject to NFRD, a distinction must be made as to whether they are earmarked or not. In the case of earmarking, a detailed examination of the taxonomy conformity of the financed asset is required. If no specific purpose has been financed, the share of taxonomy-eligible and taxonomy-compliant economic activities communicated in the borrower's non-financial reporting is included in pbb Group's GAR.

> Financial company

  As with non-financial companies, assets held against financial companies can only be taxonomy-eligible if the counterparty is subject to an NFRD obligation. It is also decisive whether the financing is earmarked for a specific purpose or not. In the case of earmarking, a detailed examination of the taxonomy conformity of the financed asset is required. If there is no specific purpose, the share of taxonomy-eligible and taxonomy-compliant economic activities communicated in the borrower's non-financial reporting is included in pbb Group's GAR. All assets of pbb Group vis-à-vis financial entities subject to NFRD are not earmarked. Thus, pbb Group can only rely on the performance indicators reported by the financial entities subject to NFRD.

> Private households

  Assets to private households can only be taxonomy-compliant if they have a special financing purpose (collateralised real estate financing, renovation financing or vehicle loans). In order for the assets to be taxonomy-compliant, the specific characteristics with regard to the sustainability of the financed property must be derived as part of a detailed review in addition to the financing purpose. Since 2003, pbb Group and its predecessor institution have no longer been involved in retail business, and in 2007 it sold the majority of its existing loan portfolio to private households. Accordingly, pbb Group only has legacy cases in its portfolio which are of minor significance. In contrast to many other credit institutions, pbb Group therefore does not have any taxonomy-capable retail business in residential property for private households, which significantly limits the comparability of pbb Group's GAR with other credit institutions.

- Public budgets

  In the case of assets vis-à-vis public-sector entities, a distinction must be made as to whether the entity in question is a central, regional or local institution. Positions vis-à-vis central governments and supranational issuers are generally not included in the GAR. As in the 2022 financial year, pbb Group classifies assets vis-à-vis regional governments as assets vis-à-vis local governments in the taxonomy eligibility test. Financing of public housing construction or other special financing can be classified as taxonomy-compliant following a detailed review of sustainability.

- Other counterparties/assets

  Collateral obtained through repossession in the form of residential and commercial properties can be included in the GAR. However, pbb Group does not hold any such collateral. Furthermore, assets due from central banks are not included in the GAR. Derivative positions, short-term interbank loans and cash and cash equivalents may only be included in the denominator of the GAR, as a result of which the GAR ratio is lower, although these are necessary transactions for credit institutions.

Large parts of pbb Group's financial assets are currently not taxonomy-eligible, as small and medium-sized enterprises, companies domiciled outside the EU and non-capital-market-oriented companies are not taken into account due to the NFRD obligation. At pbb Group, this applies in particular to financing of real estate via SPVs, including the companies behind the SPVs. This may change following a review and possible adjustment by the EU in accordance with Article 9 (1) (a) DelVO 2021/2178. According to the EU Taxonomy Regulation, the purpose of the financing, for example whether the financed property fulfils sustainability requirements, is irrelevant. Against this background, pbb Group believes that the information on taxonomy eligibility and the taxonomy conformity to be reported in the green asset ratios is not meaningful with regard to the actual proportion of assets that finance environmentally sustainable economic activities. pbb Group assumes a significantly higher taxonomy compliance if companies which are not subject to the reporting obligation of Article 19a or 29a Directive 2013/34/EU were also to be included. According to pbb Group's assessment, the majority of pbb Group's assets in commercial real estate finance with a gross carrying amount of € 31.1 billion would be taxonomy-eligible in this case, and a review of the taxonomy conformity of these assets would therefore be carried out.

Key performance indicators in accordance with Article 8 of the EU Taxonomy Regulation

As of 31 December 2023, pbb Group's total assets amounted to € 51.5 billion. Of these, a total of € 42.1 billion are GAR assets in accordance with the EU Taxonomy Regulation. Of this amount, € 982 million is taxonomy-eligible on the basis of revenue and € 985 million on the basis of CapEx. These are assets in the area of environmental objective 1 Climate action and environmental objective 2 Adaptation to climate change. A total of € 103 million of these are taxonomy-compliant on the basis of revenue and € 115 million on the basis of CapEx.

As at 31 December 2023, the GAR based on revenue was therefore 0.24% and the GAR based on CapEx was 0.27%.

Detailed information on the KPIs can be found in the following tables EU ESG6 to EU ESG8 as well as in the standardised reporting forms in accordance with Annex VI in conjunction with Article 8 (6) and (7) DelVO 2021/2178. Article 8 (6) and (7) of the DelVO 2021/2178 in the annex to this non-financial report 2023.

EU ESG6: Overview of the key performance indicators (KPIs) for taxonomy-compliant risk positions

The disclosure table EU ESG6 provides an overview of the most important KPIs calculated on the basis of the tables EU ESG7 and EU ESG8, whereby the GAR was estimated on the basis of the EU taxonomy-compliant sales revenue of the counterparty in relation to general purpose loans.

EU ESG7: Risk mitigation measures: Assets for the calculation of GAR

The EU ESG7 table shows a breakdown of the exposures eligible for the calculation of GAR by counterparty category (financial corporations, non-financial corporations, households, local authorities) and type of exposure (loans and credits, debt securities, equity instruments), and provides information on the EU taxonomy eligibility and EU taxonomy compliance of the exposures with regard to the environmental objectives 1 Climate change mitigation and 2 Climate change adaptation under the EU Taxonomy Regulation.

EU ESG8: GAR (%)

Based on the information contained in table EU ESG7, table EU ESG8 shows the proportion of risk positions eligible for recognition under the EU Taxonomy Regulation that were used to finance taxonomy-compliant measures for environmental objectives 1 Climate change mitigation and 2 Climate change adaptation. The disclosure tables EU ESG6 to EU ESG8 will be disclosed for the first time as at 31 December 2023. The new assets, i.e. those issued within the relevant disclosure period (inflows according to columns q to af), cover the 2023 financial year.

EU ESG6: Overview of the key performance indicators (KPIs) for taxonomy-compliant risk positions

	a	b	c	d
	Key Performance Indicators (KPI)			% coverage (over total assets) [1]
	Climate change mitigation	Climate change adaptation	Total (Climate change mitigation and Climate change adaptation)	
All figures in %, unless otherwise stated				
GAR stock [2]	0.24	0.00	0.24	0.20
GAR flow [3]	0.13	0.00	0.13	0.10

[1] Percentage of assets recognised for the KPI in relation to pbb Group's total assets.

[2] For the portfolio, the GAR (climate change mitigation), GAR (climate change adaptation) and GAR (climate change mitigation and adaptation) correspond to the KPIs listed in row 1, columns b, g and l of the EU ESG8.

[3] For the inflows, the GAR (climate change mitigation), GAR (climate change adaptation) and GAR (climate change mitigation and adaptation) correspond to the KPIs listed in row 1, columns r, w and ab of the EU ESG8.

EU ESG7: Risk mitigation measures: Assets for the calculation of GAR

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Assets as at the disclosure date															
		Total gross carrying amount [1]	Climate Change Mitigation (CCM) thereof towards taxonomy relevant sectors (Taxonomy-eligible)					Climate Change Adaptation (CCA) thereof towards taxonomy relevant sectors (Taxonomy-eligible)					TOTAL (CCM + CCA) thereof towards taxonomy relevant sectors (Taxonomy-eligible)				
				thereof environmentally sustainable (Taxonomy-aligned)					thereof environmentally sustainable (Taxonomy-aligned)					thereof environmentally sustainable (Taxonomy-aligned)			
	All figures in € million, unless otherwise stated				thereof special-ised lending	thereof transi-tional	Thereof ena-bling			thereof special-ised lending	thereof adapta-tion	Thereof ena-bling			thereof special-ised lending	thereof transi-tion-al/adapt ation	Thereof ena-bling
	GAR - assets included in the numerator and denominator																
1	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation [2]	7,035	814	103	-	99	3	169	-	-	-	-	982	103	-	99	3
2	**Financial corporations**	**2,153**	**632**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**632**	**0**	**0**	**0**	**0**
3	Credit institutions	2,153	632	-	-	-	-	-	-	-	-	-	632	-	-	-	-
4	Loans and advances	1,242	399	-	-	-	-	-	-	-	-	-	399	-	-	-	-
5	Debt securities, including UoP	912	234	-	-	-	-	-	-	-	-	-	234	-	-	-	-
6	Equity instruments	-	-	-	---	-	-	-	-	---	-	-	-	-	---	-	-
7	Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	thereof investment firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Loans and advances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Debt securities, including UoP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Equity instruments	-	-	-	---	-	-	-	-	---	-	-	-	-	---	-	-
12	thereof management companies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Loans and advances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Debt securities, including UoP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Equity instruments	-	-	-	---	-	-	-	-	---	-	-	-	-	---	-	-
16	thereof insurance undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Loans and advances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Debt securities, including UoP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Equity instruments	-	-	-	---	-	-	-	-	---	-	-	-	-	---	-	-

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Assets as at the disclosure date															
		Total gross carrying amount [1]	Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)					TOTAL (CCM + CCA)				
			thereof towards taxonomy relevant sectors (Taxonomy-eligible)					thereof towards taxonomy relevant sectors (Taxonomy-eligible)					thereof towards taxonomy relevant sectors (Taxonomy-eligible)				
				thereof environmentally sustainable (Taxonomy-aligned)					thereof environmentally sustainable (Taxonomy-aligned)					thereof environmentally sustainable (Taxonomy-aligned)			
All figures in € million, unless otherwise stated					thereof special-ised lending	thereof transi-tional	Thereof ena-bling			thereof special-ised lending	thereof adapta-tion	Thereof ena-bling			thereof special-ised lending	thereof transi-tion-al/adaptation	Thereof ena-bling
20	**Non-financial corporations (subject to NFRD disclosure obligations)**	**149**	**139**	**103**	**0**	**99**	**3**	**0**	**0**	**0**	**0**	**0**	**139**	**103**	**0**	**99**	**3**
21	Loans and advances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Debt securities, including UoP	149	139	103	-	99	3	-	-	-	-	-	139	103	-	99	3
23	Equity instruments	-	-	-	---	-	-	-	-	---	-	-	-	-	---	-	-
24	**Households**	**5**	**4**	**0**	**0**	**0**	**0**	**---**	**---**	**---**	**---**	**---**	**4**	**0**	**0**	**0**	**0**
25	of which loans collateralised by residential immovable property	4	4	-	-	-	-	---	---	---	---	---	4	-	-	-	-
26	thereof building renovation loans	-	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-
27	thereof motor vehicle loans	-	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-
28	**Local governments financing**	**4,728**	**38**	**0**	**0**	**0**	**0**	**169**	**0**	**0**	**0**	**0**	**206**	**0**	**0**	**0**	**0**
29	Housing financing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	Other local governments financing	4,728	38	-	-	-	-	169	-	-	-	-	206	-	-	-	-
31	Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	**Total GAR assets [2]**	**7,035**	**814**	**103**	**0**	**99**	**3**	**169**	**0**	**0**	**0**	**0**	**982**	**103**	**0**	**99**	**3**
Assets not included in the numerator for the GAR calculation (included in the denominator)																	
33	**EU Non-financial corporations (not subject to NFRD disclosure obligations)**	**26,076**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
34	Loans and advances	25,652	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
35	Debt securities	424	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
36	Equity instruments	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Assets as at the disclosure date															
		Total gross carrying amount [1]	Climate Change Mitigation (CCM)					Climate Change Adaptation (CCA)					TOTAL (CCM + CCA)				
			thereof towards taxonomy relevant sectors (Taxonomy-eligible)					thereof towards taxonomy relevant sectors (Taxonomy-eligible)					thereof towards taxonomy relevant sectors (Taxonomy-eligible)				
				thereof environmentally sustainable (Taxonomy-aligned)					thereof environmentally sustainable (Taxonomy-aligned)					thereof environmentally sustainable (Taxonomy-aligned)			
					thereof special-ised lending	thereof transi-tional	Thereof ena-bling			thereof special-ised lending	thereof adapta-tion	Thereof ena-bling			thereof special-ised lending	thereof transi-tion-al/adapt ation	Thereof ena-bling
	All figures in € million, unless otherwise stated																
37	**Non-EU Non-financial corporations (not subject to NFRD disclosure obligations)**	**7,196**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
38	Loans and advances	7,170	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
39	Debt securities	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40	Equity instruments	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
41	Derivatives	745	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
42	On demand interbank loans	812	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43	Cash and cash-related assets	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
44	Other assets (e.g. goodwill, commodities, etc.)	257	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
45	**Total assets in the denominator (GAR)**	**42,121**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Other assets that are neither included in the numerator nor in the denominator for the GAR calculation																
46	Sovereigns	6,617	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
47	Central banks exposure	2,728	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48	Trading book [3]	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
49	**Total assets excluded from numerator and denominator**	**44,431**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	**Total assets**	**51,466**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

[1] Gross carrying amount - before deduction of impairment losses on financial assets, after write-downs, before application of credit risk mitigation techniques - of loans and advances, debt securities and equity instruments in the banking book, i.e. excluding financial assets held for trading or held for sale.

[2] Eligible for the calculation of GAR are exposures associated with counterparties and asset classes that are subject to the disclosure requirements under Article 8 (Transparency in non-financial statements of companies) of the EU Taxonomy Regulation. Lines 1 and 32 of the EU ESG7 correspond in this respect.

[3] pbb Group does not maintain a trading book for securities and derivatives portfolios with the intention of generating short-term profits, which is why pbb Group does not have to disclose any information on the GAR trading portfolio (in future).

EU ESG8: GAR (%)

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Key performance indicators (KPI) for the portfolio															
		Climate Change Mitigation (CCM)					**Climate Change Adaptation (CCA)**					**Total (CCM + CCA)**					
		Proportion of eligible assets funding taxonomy relevant sectors					**Proportion of eligible assets funding taxonomy relevant sectors**					**Proportion of eligible assets funding taxonomy relevant sectors**					**Proportion of total assets covered** [1]
			thereof environmentally sustainable					**thereof environmentally sustainable**					**thereof environmentally sustainable**				
	All figures in % (compared to total covered assets in the denominator)			**thereof specialised lending**	**thereof transitional**	**Thereof enabling**			**thereof specialised lending**	**thereof adaptation**	**Thereof enabling**			**thereof specialised lending**	**thereof transitional/adaptation**	**Thereof enabling**	
1	**GAR**	**1.93**	**0.24**	**0**	**0.23**	**0.01**	**0.40**	**0**	**0**	**0**	**0**	**2.33**	**0.24**	**0**	**0.23**	**0.01**	**81.84**
2	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	1.93	0.24	-	0.23	0.01	0.40	-	-	-	-	2.33	0.24	-	0.23	0.01	13.67
3	**Financial corporations**	**1.50**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1.50**	**0**	**0**	**0**	**0**	**4.18**
4	Credit institutions	1.50	-	-	-	-	-	-	-	-	-	1.50	-	-	-	-	4.18
5	Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	thereof investment firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	thereof management companies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	thereof insurance undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	**Non-financial corporations subject to NFRD disclosure obligations**	**0.33**	**0.24**	**0**	**0.23**	**0.01**	**0**	**0**	**0**	**0**	**0**	**0.33**	**0.24**	**0**	**0.23**	**0.01**	**0.29**
10	**Households**	**0.01**	**0**	**0**	**0**	**0**	**---**	**---**	**---**	**---**	**---**	**0.01**	**-**	**-**	**-**	**-**	**0.01**
11	of which loans collateralised by residential immovable property	0.01	-	-	-	-	---	---	---	---	---	0.01	-	-	-	-	0.01
12	thereof building renovation loans	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-
13	thereof motor vehicle loans	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-
14	**Local government financing**	**0.09**	**0**	**0**	**0**	**0**	**---**	**---**	**---**	**---**	**---**	**0.09**	**0**	**0**	**0**	**0**	**9.19**
15	Housing financing	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-
16	Other local governments financing	0.09	-	-	-	-	0.40	-	-	-	-	0.49	-	-	-	-	9.19
17	Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-

		q	r	s	t	u	v	w	x	y	z	aa	from	ac	ad	ae	af
		Key performance indicators (KPI) for inflows															
		Climate Change Mitigation (CCM)					**Climate Change Adaptation (CCA)**					**Total (CCM + CCA)**					
		Proportion of new eligible assets funding taxonomy relevant sectors					**Proportion of new eligible assets funding taxonomy relevant sectors**					**Proportion of new eligible assets funding taxonomy relevant sectors**					**Proportion of total new assets covered [2)]**
			thereof environmentally sustainable					**thereof environmentally sustainable**					**thereof environmentally sustainable**				
% (compared to total covered assets in the denominator)				**thereof specialised lending**	**thereof transitional**	**Thereof enabling**			**thereof specialised lending**	**thereof adaptation**	**Thereof enabling**			**thereof specialised lending**	**thereof transitional/adaptation**	**Thereof enabling**	
1	**GAR**	**1.40**	**0.13**	**0**	**0.12**	**0**	**0.10**	**0**	**0**	**0**	**0**	**1.50**	**0.13**	**0**	**0.12**	**0**	**3.77**
2	Loans and advances, debt securities and equity instruments not HfT eligible for GAR calculation	1.40	0.13	0	0.12	0	0.10	-	-	-	-	1.50	0.13	-	0.12	-	3.77
3	**Financial corporations**	**1.23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1.23**	**0**	**0**	**0**	**0**	**3.42**
4	Credit institutions	1.23	-	-	-	-	-	-	-	-	-	1.23	-	-	-	-	3.42
5	Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	thereof investment firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	thereof management companies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	thereof insurance undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	**Non-financial corporations subject to NFRD disclosure obligations**	**0.17**	**0.13**	**0**	**0.12**	**0**	**0**	**0**	**0**	**0**	**0**	**0.17**	**0.13**	**0**	**0.12**	**0**	**0.15**
10	**Households**	**0**	**0**	**0**	**0**	**0**	---	---	---	---	---	**0**	**0**	**0**	**0**	**0**	**0.01**
11	of which loans collateralised by residential immovable property	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	0.01
12	thereof building renovation loans	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-
13	thereof motor vehicle loans	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-
14	**Local government financing**	**0**	**0**	**0**	**0**	**0**	---	---	---	---	---	**0**	**0**	**0**	**0**	**0**	**0.19**
15	Housing financing	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-
16	Other local governments financing	-	-	-	-	-	0.10	-	-	-	-	0.10	-	-	-	-	0.19
17	Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	---	---	---	---	---	-	-	-	-	-	-

[1)] KPI for the portfolio (column p): Percentage of assets recognised in the GAR in accordance with EU ESG7.
[2)] KPI for inflows (column af): Percentage of newly issued assets recognised in the GAR in the relevant disclosure period.
Tables EU ESG6 to EU ESG8 are disclosed for the first time as at the disclosure date of 31 December 2023. The new assets (inflows according to columns q to af) cover the 2023 financial year.

Voluntary sustainable key performance indicators

In pbb Group's view, the GAR ratios according to the EU taxonomy are not meaningful with regard to the actual share of environmentally sustainable assets, as there are already restrictions in terms of taxonomy eligibility. By referring to the NFRD reporting obligation, the taxonomy eligibility criterion excludes financing for small and medium-sized enterprises, companies domiciled outside the EU and non-capital-market-oriented companies across the board. Most of pbb Group's clients do not fulfil the taxonomy eligibility criteria, in particular financing of real estate via SPVs. However, these criteria are not an indicator of the sustainability of the financing or the financed property.

Pro forma green asset ratio

For a more meaningful measurement of the share of sustainable financing, pbb Group calculates a pro forma green asset ratio which abstracts from the taxonomy eligibility criterion in accordance with the EU Taxonomy Regulation. All financial assets that fulfil the comprehensive conformity criteria of the EU Taxonomy Regulation are classified as sustainable, irrespective of the assessment of taxonomy eligibility. The criteria for assessing taxonomy compliance are the significant contribution to the realisation of one or more of the stated environmental objectives, the non-impairment of one or more of the other environmental objectives and compliance with the minimum protection standards. Abstracting from the taxonomy eligibility criteria is based on the Banking Book Taxonomy Alignment Ratio (BTAR), which the EBA has defined for Pillar III ESG disclosure in accordance with Art. 449a CRR from the reporting date of 31 December 2024. The pro forma green asset ratio amounts to 15.1% for the REF portfolio totalling € 31.1 billion and 11.4% for the GAR assets totalling € 42.1 billion.

pbb Green Loan Framework

pbb Group introduced the pbb Green Loan Framework in the fourth quarter of 2021, in line with the increasing importance of sustainable financing in recent years. The pbb Green Loan Framework is based on an independent scoring model: the scoring model allows the evaluation of a property that qualifies for a sustainable loan on the basis of defined criteria from a defined score. According to the pbb scoring model, a property or project is assessed based on the three pillars of energy efficiency, green building certification and additional sustainability criteria (such as distance to public transport and local facilities, use of green electricity or inclusion of biodiversity aspects). Alternatively, properties qualify for a sustainable loan under the pbb Green Loan Framework if they comply with the EU taxonomy.

The proportion of sustainable assets defined in this way is to be increased by concluding new business or extending existing business in line with the pbb Green Loan Framework or the EU taxonomy, without taking taxonomy eligibility into account. pbb Group sets specific indicators and targets for active strategic management. By 2026, pbb Group aims to have more than 30% green loan-eligible assets in the REF portfolio. In addition, the new business volume of green loan-eligible assets among the financed real estate properties is to reach 32% by 2025. As at 31 December 2023, the share of green loan-eligible assets in the REF portfolio was 21.8% and the volume of new business was 24.8%.

As a result, the requirements for EU taxonomy compliance are directly incorporated into pbb Group's strategy, objectives, management and product design processes. The sustainability of properties increasingly correlates with their credit risk. As a result, poor sustainability has an increasing impact on the higher pricing of financing and the risk-induced selection of new business.

EU ESG10: Other climate protection measures not covered by Regulation (EU) 2020/852 (EU Taxonomy)

The EU ESG10 table provides an overview of recognised loans and bonds at the end of 2023 that support the transition to sustainable growth and a climate-neutral economy. In this respect, it shows all risk positions that aim to mitigate climate-relevant risks but are not fully compliant with the EU Taxonomy Regulation and are therefore not included in the calculation of GAR (EU ESG6 to EU ESG8). In this respect, pbb Group recognises both its assets in green loans (based on pbb's Green Loan Framework) and in green bonds in the portfolio. The gross carrying amounts of the green bonds as at 31 December 2023 amount to € 286 million (30 June 2023: € 136 million), while the gross carrying amounts of the green loans amount to € 1,856 million (30 June 2023: € 1,102 million). The increase as at 31 December 2023 is mainly due to the improvement in data quality in the existing business.

As described in the previous section "pbb Green Loan Framework", pbb has been offering green loans since the fourth quarter of 2021, based on pbb's internally developed Green Loan Framework. In particular, this includes loans to finance green portfolio properties, development finance for green buildings and transformation finance for portfolios that are to be developed into green properties. The two elements of the Green Loan Framework - pbb's own scoring model and the EU taxonomy - are linked, i.e. pbb Green Loan Scoring is based on the criteria of the EU taxonomy, and pbb Scoring also includes "soft" criteria (additional sustainability criteria) that are not found in the EU taxonomy.

EU ESG10: Other climate protection measures not covered by the EU Taxonomy Regulation

		b	c	d	e	f
	Type of financial instrument	**Type of counterparty**	**Gross carrying amount**	**Type of risk mitigated (Climate change transition risk)**	**Type of risk mitigated (Climate change physical risk)**	**Qualitative information on the nature of the mitigating actions [1)]**
All figures in € million, unless otherwise stated						
1	**Bonds**	Financial corporations	209	Climate change transition risk	-	Green bonds issued by the European Investment Bank ("EIB") or Germany's Kreditanstalt für Wiederaufbau ("KfW")
2	(e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Non-financial corporations	-	-	-	
3		of which loans collateralised by commercial immovable property	-	-	-	
4		Other counterparties	77	Climate change transition risk	-	Funding of local authorities to support their sustainable investments
5	**Loans [2)]**	Financial corporations	-	-	-	
6	(e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Non-financial corporations	1,784	Climate change transition risk	-	Loans classified as sustainable in line with pbb's ESG scoring
7		of which loans collateralised by commercial immovable property	1,784	Climate change transition risk	-	Loans classified as sustainable in line with pbb's ESG scoring
8		Households	-	-	-	
9		of which loans collateralised by residential immovable property	-	-	-	
10		thereof building renovation loans	-	-	-	
11		Other counterparties	72	Climate change transition risk	-	Loans classified as sustainable in line with pbb's ESG scoring

[1)] Column f contains information on the nature of "other" risk-mitigating measures to mitigate climate change that may not be fully compliant with the EU taxonomy criteria.

[2)] The volume of green loans granted by pbb since the fourth quarter of 2021 had risen to around € 2,131 million by the end of 2023 (including irrevocable loan commitments). The gross carrying amount of the loans already disbursed amounts to € 1,856 million.

Outlook

Pillar 3 data hub (Pillar 3 Data Hub)

According to the "Annual Report 2021" published on 15 June 2022, the EBA aims to further improve market discipline and promote the use of Pillar 3 information by creating central access to Pillar 3 information (the so-called Pillar 3 Data Hub, P3DH) for credit institutions in the European Economic Area (EEA). The Pillar 3 information published in the P3DH is also to flow into the European Single Access Point (ESAP), a centralised access point to all publicly available information in the EU. The P3DH is thus intended to provide all EEA institutions with simple electronic access to qualitative and quantitative Pillar 3 information (via the EBA website), thereby facilitating the comparability of information.

To implement this project, CRR III (planned date of application: 1 January 2025) will introduce a corresponding mandate for the EBA in Article 434 (1) and (3) CRR III. On 14 December 2023, the EBA published the discussion paper EBA/DP/2023/01 "Pillar 3 Data Hub, Processes and possible practical implications", which contains initial ideas for the development and functioning of the P3DH. The timeline envisages that the operationalisation of the P3DH will follow the CRR III disclosure schedule. The consultation of EBA/DP/2023/01 ended on 29 March 2024.

In this respect, the P3DH should be ready for use in 2025, with large institutions in particular, such as pbb, already starting centralised disclosure via the P3DH in 2025.

List of illustrations

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Certificate of the Management Board

In accordance with Article 431 (3) sentences 1 to 3 CRR

The Management Board of pbb assures to the best of its knowledge that this Disclosure Report has been prepared in accordance with the formal procedures and rules implemented within pbb Group to fulfil the disclosure requirements pursuant to part 8 of the CRR.

Munich, 30 April 2024

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