

# Annual Report 2018

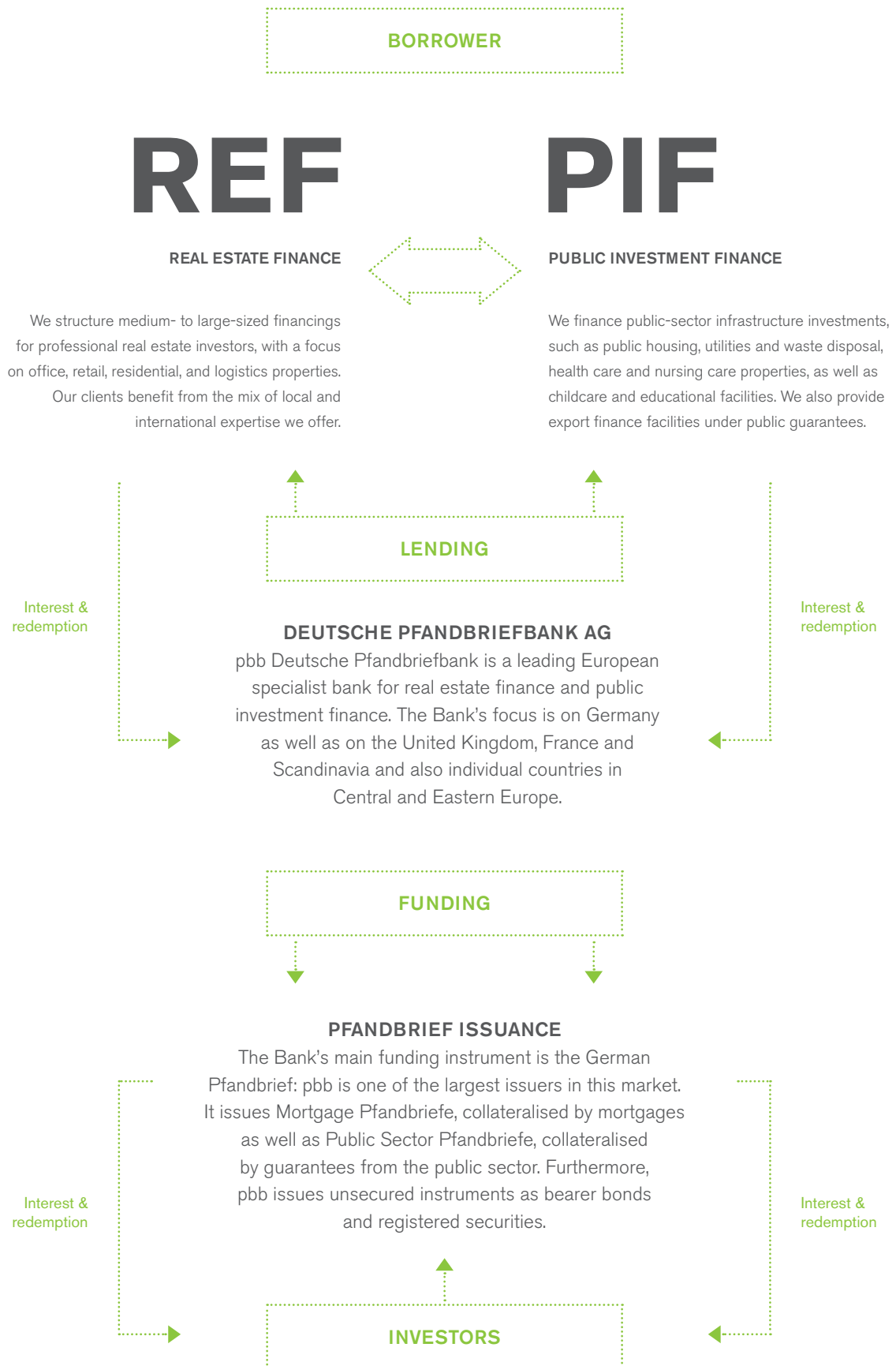
Deutsche Pfandbriefbank Group

# pbb

DEUTSCHE  
PFANDBRIEFBANK



# Business model pbb Group



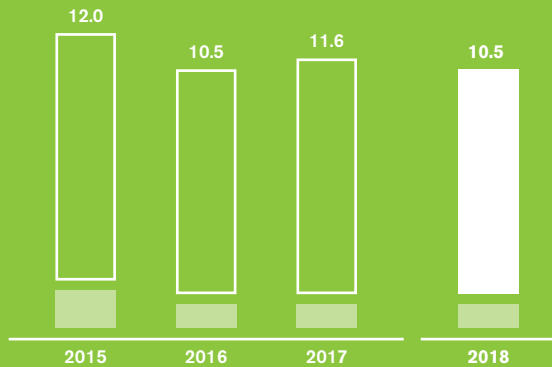
# Facts and Figures

Transactions 2018 (REF & PIF)

# 210

New Business

# €10.5 bn



New Business  
in € billion (commitments, including extensions >1 year)

■ Real Estate Finance ■ Public Investment Finance

## €26.8 bn

**funding volume in REF**

Compared with the previous year the funding volume in the main business area of REF increased by 8% – with continued strict risk criteria in new business.

## 750

**members of staff**

pbb employs 750 members of staff (on the basis of full time equivalent) at ten locations in Germany, Europe and the USA and is thus always near to its clients and the financed properties.

## €29.5 bn

**Pfandbrief volume**

Pfandbriefe are German covered bonds and are therefore a cost-efficient source of funding. With an outstanding Pfandbrief volume of €29.5 bn (nominal), pbb ranks among the largest issuers.



## Development of new business in our core asset classes in 2018 (in €)



# Overview

Deutsche Pfandbriefbank Group (pbb Group)		2018	2017
<b>Operating performance according to IFRS</b>			
Profit or loss before tax	in € million	215	204
Net income/loss	in € million	179	182
<b>Key ratios</b>			
Cost-income ratio	in %	44.2	47.0
Return on equity before tax	in %	7.1	7.3
Return on equity after tax	in %	5.9	6.5
Earnings per share	in €	1.24	1.35
Dividend per share	in €	1.00 <sup>1)</sup>	1.07
New business volume <sup>2)</sup>	in € billion	10.5	11.6
<b>Balance sheet figures according to IFRS</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
Total assets	in € billion	57.8	58.0
Equity	in € billion	3.3	2.9
Financing volumes Real Estate Finance	in € billion	26.8	24.9
<b>Key regulatory capital ratios</b>		<b>31.12.2018<sup>3)</sup></b>	<b>31.12.2017<sup>4)</sup></b>
CET1 ratio	in %	18.5	17.6
Own funds ratio	in %	24.9	22.2
Leverage ratio	in %	5.3	4.5
<b>Staff</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
Employees (on full-time equivalent basis)		750	744
<b>Long-term issuer rating/outlook<sup>5)6)</sup></b>		<b>31.12.2018</b>	<b>31.12.2017</b>
Standard & Poor's		A-/Negative	A-/Negative
DBRS <sup>7)</sup>		BBB/Positive	BBB/Stable
<b>Moody's Pfandbrief rating<sup>6)</sup></b>		<b>31.12.2018</b>	<b>31.12.2017</b>
Public Sector Pfandbriefe		Aa1	Aa1
Mortgage Pfandbriefe		Aa1	Aa1

<sup>1)</sup> Proposal to the Annual General Meeting on 7 June 2019.

<sup>2)</sup> Including prolongations with maturities of more than one year.

<sup>3)</sup> After confirmation of the 2018 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

<sup>4)</sup> After confirmation of the 2017 financial statements and appropriation of profits.

<sup>5)</sup> The ratings of unsecured liabilities may diverge from the issuer ratings.

<sup>6)</sup> Please refer to the "Report on Economic Position" for a detailed description of the ratings.

<sup>7)</sup> The rating mandate with DBRS was terminated as of 31st December 2018.

## Cover

Office complex "One Five One", New York City.

For more information, please turn to page IV.

## Information due to rounding

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

## Explanation of alternative performance measures

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



# Change and continuity

Characterised by both change and continuity: while this might sound like a contradiction, it is pbb's recipe for success. In combination, these two factors are exactly what makes up our nature and drives our growth.

The dynamic nature – of markets and market participants, of the environment and client needs – requires flexibility. We shape and use change in a targeted manner, so as to further enhance our proven business model, and position ourselves intelligently in the market. This way, our change is always accompanied by a promise to our clients and partners: you can rely on pbb's continuity.

# Letter from the Management Board

## DEAR SHAREHOLDERS, DEAR BUSINESS PARTNERS, LADIES AND GENTLEMEN,

Deutsche Pfandbriefbank AG (pbb) achieved a good result in 2018 despite a challenging environment. At €215 million, Group profit before taxes exceeded the previous year's figure by approximately 5%, the three main drivers being: stable revenues in the lending business, reduced funding expenses, and continued cost management. On this basis, the Management Board and the Supervisory Board will propose to the Annual General Meeting to pay a dividend of €1 per share, meaning that ordinary equity holders would receive approximately 81% of the consolidated profit attributable to them. Based on the year-end closing price, this would result in a dividend return of 11.4%.

Real estate markets developed solidly once again: transaction volumes were on a high level, prices and rents stable, and vacancies on a low level. Risks of a cool-down, however, increased. Competition amongst real estate finance providers also failed to abate, making it even more difficult to generate new business with a conservative risk profile and appropriate profitability. Margins on new business were thus generally under pressure, and finance providers had trouble enforcing covenants.

pbb reacted to this situation by selecting its new business even more carefully, and by clearly stipulating that the Bank's high risk standards are to be adhered to – in cases of doubt, to the detriment of the business volume. At €10.5 billion, pbb achieved its target of a consciously reduced volume compared with the previous year. The Bank kept the average gross margin on new business stable in real estate financing, at approximately 155 basis points. However, it took significantly more effort to achieve this.

Until now, indicators for 2019 have not been pointing to any material market correction. Most market participants, however, feel that the upward phase of the current real estate cycle has already been very long. In addition, some sub-segments, e.g. the real estate market in the United Kingdom, or retail properties, are experiencing momentum peculiar to themselves – the former driven by the uncertainty arising from Brexit, and the latter due to structural developments. Thus, pbb is focusing even more strongly on the quality of the investors and properties to be financed, as well as on the covenants. The latter are an important starting point for finance providers to react to the weaker performance of a property; they also determine the action framework for borrowers and lenders. Furthermore, we manage our portfolio in a targeted manner: by overweighting business in the US, whilst reducing our exposure to the United Kingdom, underweighting retail properties and maintaining a cautious stance vis-à-vis development financings.

Funding activities in 2018 were equally strong as was lending. As funding needs could be reduced, and new bonds had more favourable terms than the maturing liabilities, we were able to significantly reduce our interest expenses. This development should continue in 2019, even though the cost benefits of new over existing issues should go down, since risk premia for banks are increasing again. In addition, we have certain flexibility regarding the management and cost optimisation of our liabilities side. On the one hand, we can make use of the new debt class "preferred senior" since the change in the legal framework. It ranges between Pfandbriefe and "senior non-preferred" debt; structurally, it thus has a higher rating and lower funding costs. On the other hand, pbb has its proven and scalable pbb direkt platform for the retail deposit-taking business with private investors since an early digitalisation initiative in 2013.



**Andreas Arndt**



**Thomas Köntgen**



**Andreas Schenk**



**Marcus Schulte**

Our aspiration to achieve sustainable development requires innovation. In addition to a number of smaller steps in many areas at pbb, two special initiatives demonstrate how pbb has advanced in this respect in 2018. We set up the resources required to grow the US real estate financing business, the best signal being the new representative office in New York. We are not only extending activities in our established East Coast target markets to primary business, but also offering our services in new regions (Chicago, Los Angeles, San Francisco, Seattle). We have also further promoted digitalisation – starting with the creation of an organisational framework for our digitalisation initiatives, going on to the preparation of a customer portal, up to the launch of the CAPVERIANT platform for public-sector financing. We will advance this development using three strategic directions: client interfaces, efficiency, and new sources of income.

These innovations require investments. In 2018 general administrative expenses were slightly below the previous year's level, as a result of lower personnel expenses. However, we were able to avoid an increase in non-personnel expenses despite the investments. We will continue to invest in the US business and digitalisation in 2019, which we will once again contrast with cost savings – by relocating tasks from satellite locations to the head office, and rescaling the business in Public Investment Finance.

2018 demonstrated – once again – the importance of being flexible, whilst adhering to one's principles, which is why the first chapter of our Annual Report is headed "change and continuity", attributes which also characterise our colleagues at pbb. They are crucial to pbb's success, and we would like to thank them most sincerely. We would also like to express our gratitude to our clients on the assets and liabilities side, who place their trust in pbb's performance.

Yours sincerely,

**Andreas Arndt**  
CEO and  
Chief Financial Officer

**Thomas Köntgen**  
Deputy CEO, Real Estate Finance  
and Public Investment Finance

**Andreas Schenk**  
Member of the  
Management Board,  
Chief Risk Officer

**Marcus Schulte**  
Member of the  
Management Board,  
Treasurer



**High Standards**

From the façade to the electricity supply and the lighting: With the modernisation of the New York skyscraper "One Five One", emphasis has been placed on sustainability.



**NYC  
Green Building**

**New York:  
The first green skyscraper**

One office building stands out in the middle of Manhattan: "One Five One". The name comes from the address 151 West 42nd Street. The high rise building which was constructed in 1999 is recognized as the first green skyscraper in the US.

It was the first project of its size which took into account standards for energy efficiency, indoor air quality, tenant comfort, sustainable materials and responsible construction. The majority of work now being done on the building is to bring it up to the most modern standards.

NYC

ONE FIVE ONE



▼ **Financing:**

- Of the total pending loan credit volume of US\$ 900 million, pbb will provide US\$ 100 million as part of a syndication.
- The loan will be advanced to the Durst Organisation, one of the oldest family owned businesses for real estate in New York City. The Durst Organisation assembled the land, developed the property and has operated the property since its completion.

▼ **Building Concept:**

- Office Tower with 48 floors
- Retail on the ground floor with its front looking onto the lively Times Square
- "Feel Good Days" with food court, coffee and wine bar, joint event and conference facilities
- Attractive outside terrace area

▼ **Sustainability:**

- Amongst other things, the following elements demonstrate the sustainable aspects of this innovative building:
- Energy efficient lighting
  - Façade which regulates interior climate
  - Absorption cooler/heating elements driven by natural gas
  - Integrated photovoltaic modules
  - LEED-Certification „Gold“

▼ **Total Space:**

167,000 square metres



Holding on to  
the tried and  
tested – changing  
with a sense  
of proportion.  
We offer our  
clients stability  
in a changing  
environment.

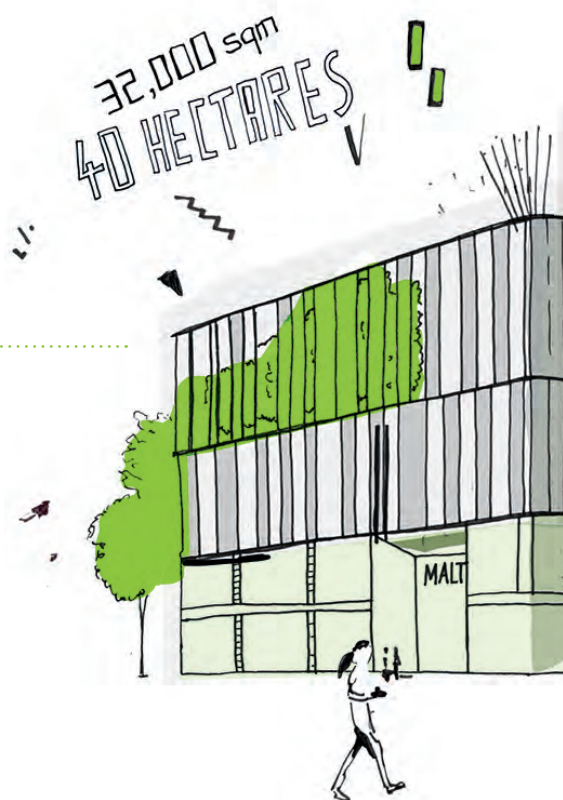
# Laying the digital groundwork

The digital transformation is well underway. Within the scope of our digitalisation strategy, we are implementing different measures and projects. These will help us to remain flexible in times when innovations come at an ever faster speed.

Digitalisation impacts all aspects of life and economy – and the banking sector is no exception. Clients are increasingly expecting processes and communication to be fully available via digital channels. In this context, more and more new providers are entering areas which – a few years ago – were exclusively occupied by banks, including, for example, payment solutions or loan intermediation for retail clients.

This makes it even more important for us to maintain our strong position as a leading provider of financing solutions, to make our business future-proof, and to make use of the qualitative features which we have always been renowned for: technical expertise, experience, market proximity, networks, and the personal contact with our clients.

**“Clients increasingly expect that processes and communication are completely available in a digital format.”**

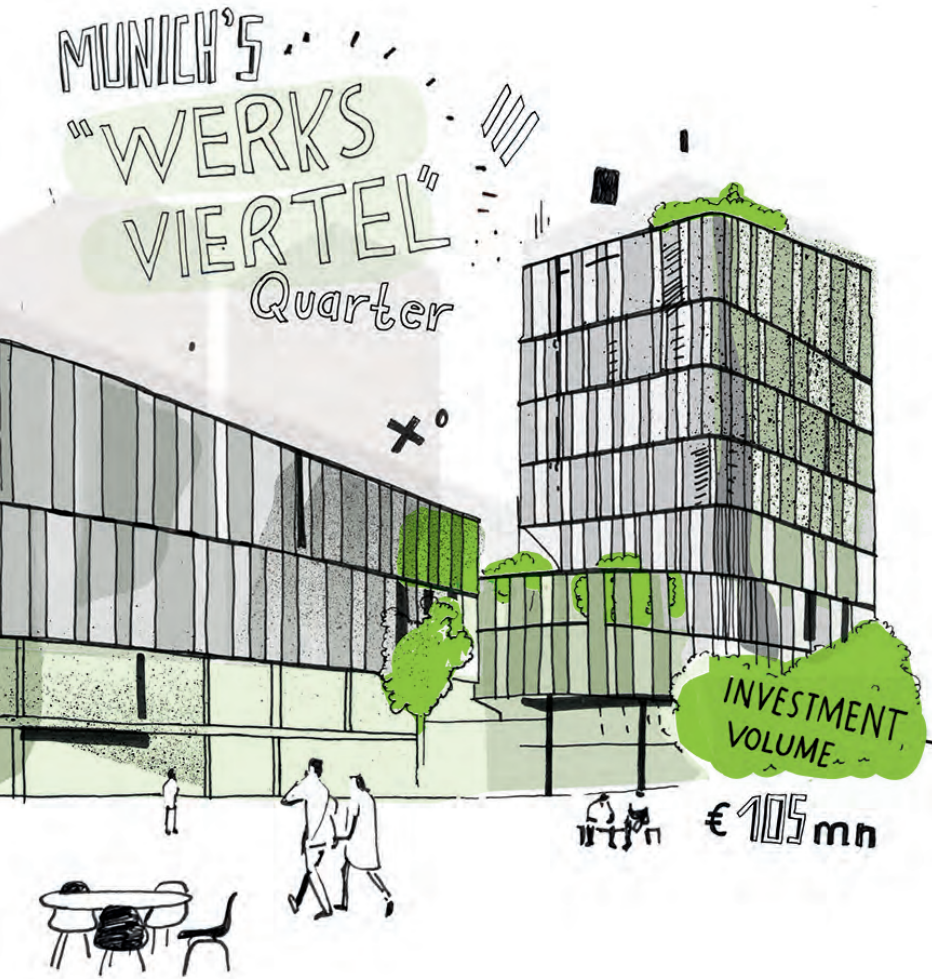


## The three core objectives of our digitalisation strategy

We have defined an overarching strategy in order to organise the complex subject of digitalisation at pbb in a structured manner across all areas. We are following three strategic directions:

- improving client interfaces,
- enhancing the process efficiency and quality within pbb, and
- defining new products, business models, and sales approaches, in order to generate additional sources of income.

At pbb, we ensure that the digitalisation process is firmly rooted within the entire Bank – and that it can be realised, by establishing the appropriate organisational framework and corresponding resources. The new Digitalisation business area bundles the management of innovative ideas, technologies and business models, and accompanies specific measures in the individual departments. By ensuring the necessary interlinking of all activities for the digitalisation process, the Digitalisation Board is a first step towards pbb's digital transformation.



## Munich's "Werksviertel" Quarter:

### Optineo – innovative office and retail building at a top location

By financing an office and retail building for WÖHR + BAUER GmbH, pbb is contributing to the development of a young, urban city quarter. Development of the "Werksviertel" quarter – a large former industrial area (measuring some 40 hectares) adjacent to Munich's East railway station – commenced in 2012. The city-centre location, with excellent transport infrastructure, will house flats and office buildings, shops and restaurants, and the new Munich concert hall.

#### ▼ Financing:

pbb provided a loan of €105 million for the purchase of a plot of land and the establishment of an office and retail property in Munich's "Werksviertel" quarter.

#### ▼ Building concept:

Innovative retail and office building with LEED Green Building certification, comprising a 17-storey, 65-metre tower with a connected five-storey building.

#### ▼ Type of use:

Modern and flexible office spaces with attractive roof terraces and loggias on all floors and restaurants on the ground floor.

#### ▼ Total space:

32,000 square metres

#### ▼ Planned completion:

2022



#### Architectural Highlight

Shaping the face of the city: pbb is financing a prominent office and retail building in a new Munich quarter "Werksviertel".

### **Client portal for secure processes**

We launched the first stage of our web-based client portal in 2018, aiming to establish secure and efficient communication between clients and the Bank. In addition, payment data and other documents, such as invoices and account statements, can be transferred, and payment instructions can be settled quickly and conveniently. This platform establishes a simplified client interface, and optimises internal processes – the portal thus covers two out of the three strategic directions of our digitalisation strategy.

### **CAPVERIANT: a fintech within pbb**

Another example is the online platform CAPVERIANT, initiated and operated by pbb. The portal digitalises the European market for public-sector financing, which was previously primarily organised on a local level and thus not very transparent. CAPVERIANT offers a broader market access due to its digital reach – for the public sector and institutional investors.

Its core function consists of intermediation and search: CAPVERIANT enables public-sector authorities to present their projects to potential financing partners. Institutional investors on the other hand can provide loan offers. In this way,

→ **funding opportunities for the public sector increase, whilst funding costs decrease;**

→ **furthermore, new investment opportunities arise for institutional investors, without having to establish sales infrastructure.**

CAPVERIANT also digitalises the municipal financing process for both sides, thus enhancing efficiency. In May 2018, the platform was successfully launched on the German market; its market entry in France is scheduled to take place in 2019.

As a fully-owned subsidiary of pbb, CAPVERIANT is basically a fintech within the Bank – playing a central role in our digitalisation strategy. The insights and experience gained during the establishment and operation of CAPVERIANT are set to benefit digital initiatives in pbb's core business. Potentially, the platform might be used for further products.

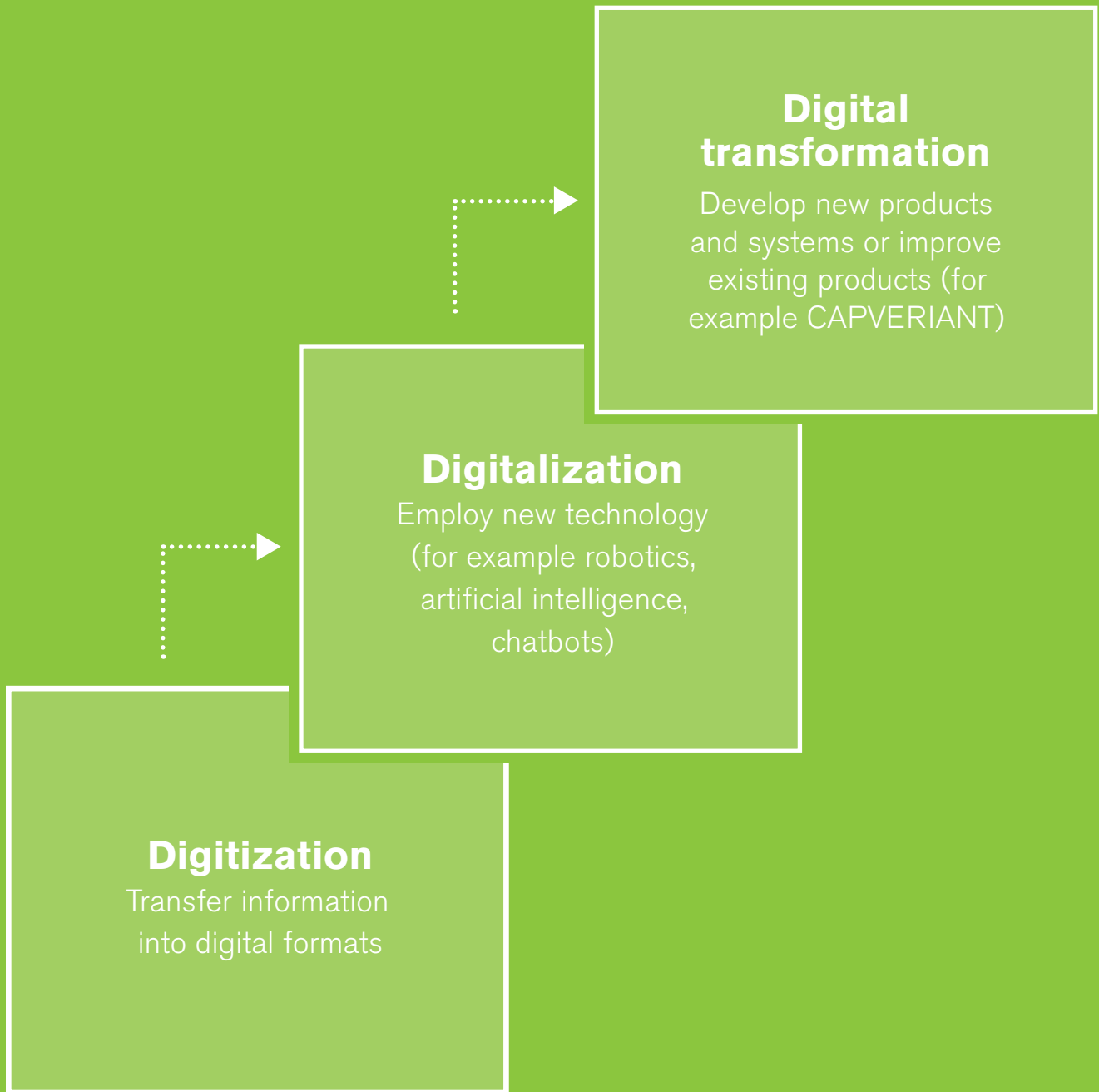
### **Open to innovation and cooperation**

In an increasingly connected world, cooperations are becoming more and more important. We keep a constant eye on the relevant markets and market players: we are always open for valuable input and meaningful synergy effects. In 2018, we joined the Real Estate Innovation Network (REIN). This pan-European initiative allows start-ups, established companies and interested market participants to exchange views against the background of the real estate economy's ongoing digitalisation.

We especially hope to obtain new impulses and perspectives by participating in the initiative: which technologies are used on the market, what are clients interested in? Which are the relevant fintechs and proptechs? What do their innovations look like? What can we learn from their way of thinking and working?



# Digitalization strategy

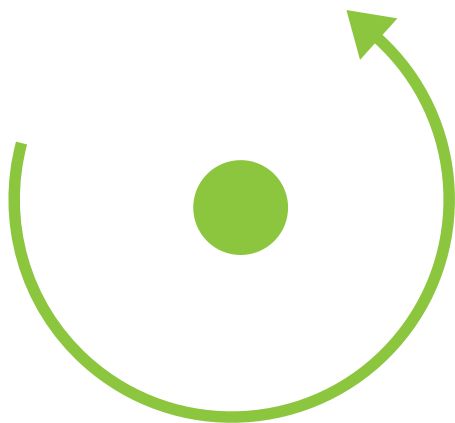


# Consistent sustainable actions

Whilst we attach value to the goal of our business activities – to be economically successful in the long term – we also have high demands regarding responsible corporate governance. Sustainability is a key aspect – within our own thinking and acting, as well as when extending loans.

As a leading specialist bank for the financing of commercial real estate and public infrastructure investments in Europe and the US, we are responsible on many levels. Our stakeholders are clients and banking partners, pbb's equity and debt investors, and service providers and suppliers – and of course, our employees. We want to create long-term value for all of them, establish benefits to society, and protect natural resources.

Sustainability is our leitmotif. Our sustainability strategy defines how we can combine our responsibility with economic success in the best way possible. Key objective in this context is to consolidate and extend sustainability awareness, anchoring it as an integral component of pbb Group.



## **Focus on our clients**

Industry-specific aspects have the largest impact on pbb's business activities. As the clients form the basis of our business, client orientation – in the form of dialogue, proximity, and trust – is particularly important. By taking a close look at our clients' specific markets, we understand their needs and can provide them with optimal tailor-made financing solutions: with our sales offices in Germany and other important locations in Europe and the United States, we are close to our clients and the financed properties. Thanks to our teams of experts, we can offer comprehensive know-how on specialist real estate finance topics.

## **Sustainable financing solutions**

pbb contributes to society by financing investments for the provision and improvement of public infrastructure. Many of these projects have direct and sustainably positive social and environmental effects – for instance, investments in social housing, public administration buildings, or renewable energy.

For the financing of public-sector infrastructure projects as well as of commercial real estate, we set high standards when granting loans – also in terms of sustainability. No matter whether we are financing a building project or existing properties: besides economic aspects, ecological considerations play an important role. We have defined and established processes to ensure careful examination and assessment, in particular regarding income streams and the building structure itself.



**Change in Warsaw**

The “Central Department Store” from the fifties was transformed into a future-orientated office and retail property with high standards of sustainability.



## Warsaw: CEDET

**A modern concept for a historic building**

CEDET lies in the heart of Warsaw – a prominent example of Polish architecture from the post-war period, previously known as the “Central Department Store”. Built in 1952, the building was recently restored and extended by the Belgian project developer Immobel. Whilst the charm of the historical landmark remains intact, it is now equipped with first class technical features and meets the sustainability standards for “BREEAM Excellent”. A perfect example of “change and stability”.

▼ **Financing:**

- €75.4 million loan volume for the purchase of the CEDET-building provided to a Polish company managed by GLL Real Estate Partners GmbH.
- pbb acted as Arranger and sole credit provider

▼ **Building concept:**

A former department store building in the centre of the business quarter in Warsaw, which was extensively modernised with regard to its technical features and aspects of sustainability, thus increasing its value.

▼ **Type of use:**

Combination of high-value retail and office space

▼ **Sustainability:**

- Following the renovation CEDET was awarded the BREEAM seal of approval with the second highest level of “Excellent”.
- BREEAM is a renowned certificate for sustainable building and renovation. It is awarded according to a points system in varying categories such as energy, water and materials.

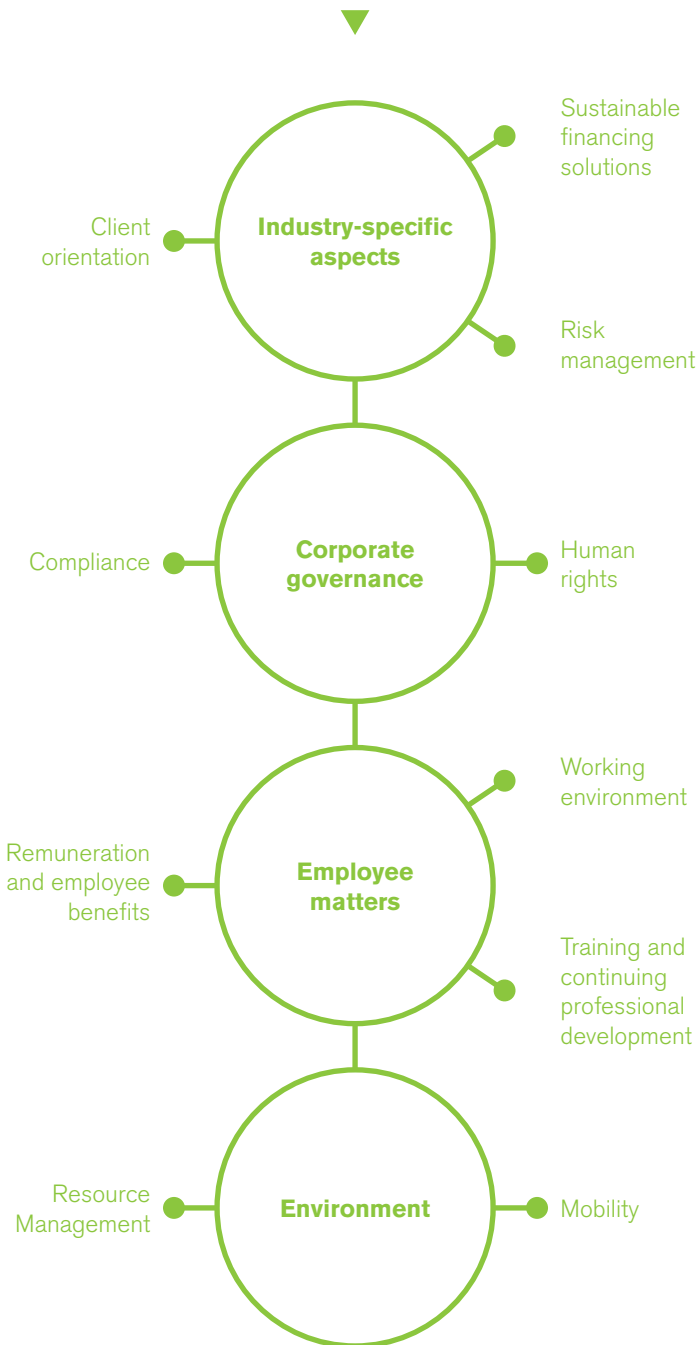
▼ **Total space:**

Approximately 23,800 square metres

**CSR Committee: A hub for sustainability topics**

The CSR Committee was formed in 2017 as a vital instrument for embedding sustainability topics. The chief responsibility of the CSR Committee – composed of representatives from different divisions – is to develop and implement the sustainability strategy. In addition, it determines sustainability targets and the measures necessary to achieve them.

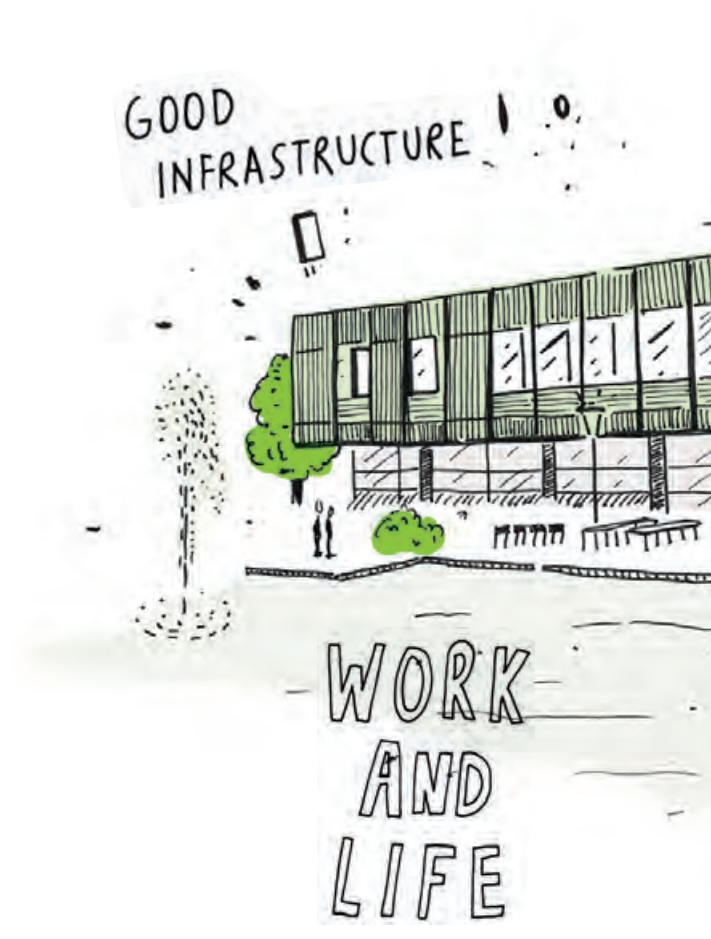
We carried out a materiality analysis in several steps, in order to determine the material sustainability aspects for pbb and its stakeholders.



**Our own real estate project**

Parking in Garching near Munich: for once, this address is not about a client's real estate project, but about pbb itself. In the summer of 2019, we will move our headquarters from Unterschleissheim to the Business Campus Garching. In particular, our employees will benefit from this change.

**“In the summer of 2019, we will move our headquarters from Unterschleissheim to the Business Campus in Garching.”**





▼ **Locational advantage**

Most of our employees' daily commutes will be shorter after the move. They benefit from excellent connections to the public transport infrastructure. The high-frequency underground line 6 is only a few minutes' walk from our new headquarters. In addition, there are car-sharing offers and charging stations for e-bikes.

▼ **Energy concept**

The new building is designed to be resource-friendly: heat is obtained from geothermal energy, and electricity is generated from photovoltaic systems.

▼ **Room for ideas**

In one wing, we will make use of around 14,200 square metres on six floors.

▼ **Neighbourhood**

The Business Campus Garching offers a park-like atmosphere with lawns and bodies of water, as well as an attractive infrastructure with a lively mix of offices, shops, restaurants and service providers.

▼ **Sense of community**

A modern building concept with team offices and meeting points shortens communication channels and facilitates cooperation. Furthermore, we aim to improve compatibility of family and career. Employees have been actively involved in the design of the offices and community areas.



**Attractive working environment**

As of the summer of 2019, the Bank's headquarters will be based on the Business Campus. Next to a modern work environment, this location offers a park-like ambience and diverse shopping facilities (View of building see small photographs above).

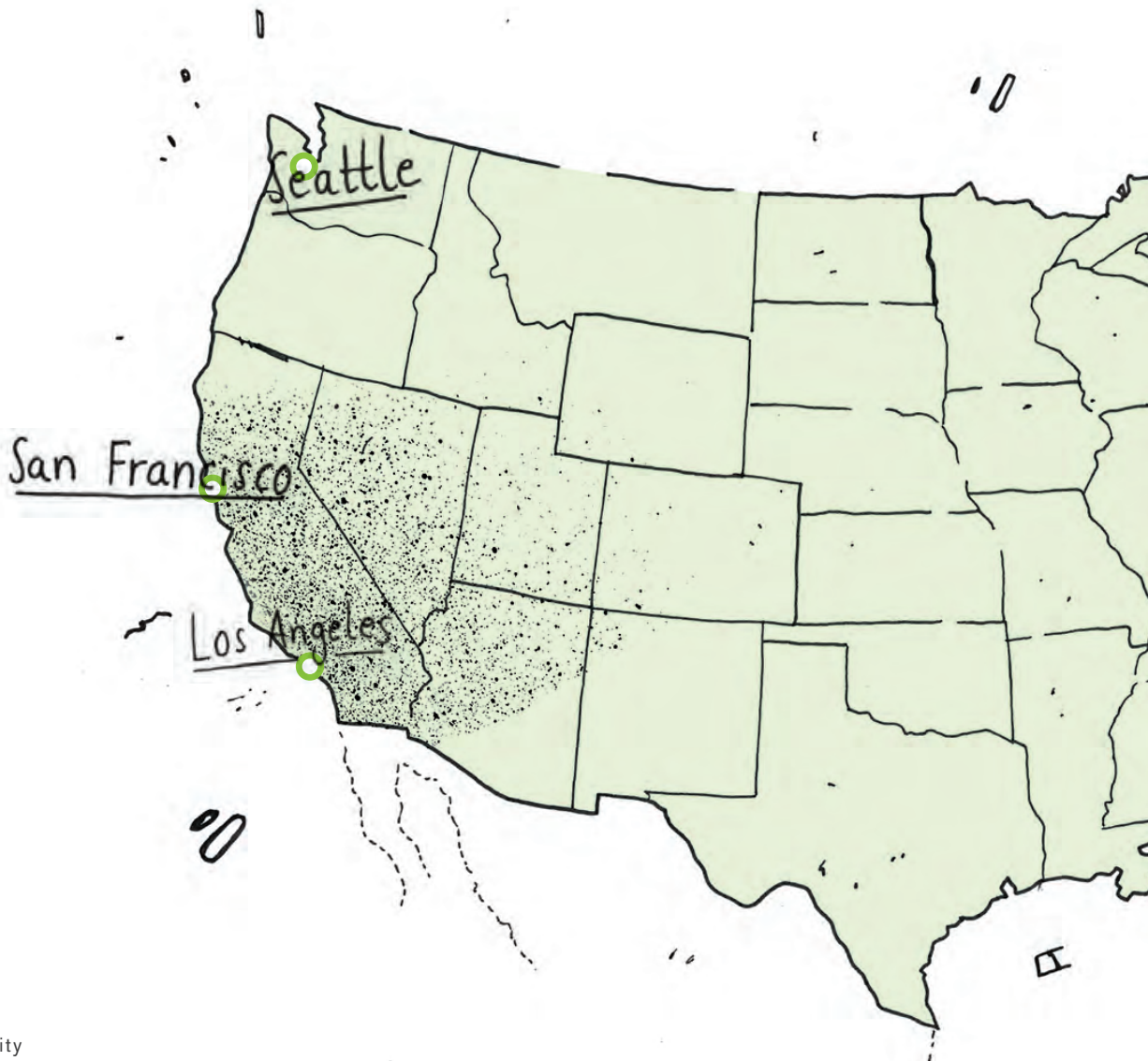


# Building our portfolio in line with market conditions

The markets in which we operate are constantly changing. Political decisions, economic trends and changes in the legal framework directly and indirectly impact pbb's business. Our portfolio management reflects this.

Particularly during tumultuous times, one has to continuously keep an eye on the political and economic "climate". For us, this means that we must constantly compare our activities – new business as well as existing portfolio – with the developments surrounding us, and make short-, mid- or long-term adjustments, if appropriate. The goal is to achieve a low-risk portfolio mix in line with the market.

A current example is Brexit. Due to considerable uncertainty surrounding the organisation – and execution – of the United Kingdom's exit from the European Union, we have reduced our UK exposure for now.



**US business expansion**

Our commitment in the US, however, is constantly growing. We have been active in the world's largest real estate market since 2016. Whilst initially we limited our business to participating in financings of strategic partners, we are now also active on the primary market. Furthermore, we have expanded our regional focus and now cover not only the East Coast, but also Chicago and the West Coast metropolises Los Angeles, San Francisco and Seattle.

Opening a pbb representative office in New York was a prerequisite for increasing our activities, since we always need local expertise. As scheduled, the office opened and commenced work in 2018. Among other things, the team supports our international clients with regard to their business in the US.



**Loan portfolio influenced by mega trends**

However, we do not just focus on regional markets, but also on the developments in relevant sectors. Mega trends such as e-commerce, digitalisation, globalisation and demographic change are transforming supply and demand, as well as requirements in the real estate sector, leading to a shift of our business in some segments. A recent example is the lower level of new business generated in the retail sector. Business with retail properties is also declining, whereas the office and logistics property sectors are growing, triggered by market developments (to be continued on the following pages).



We are already active in seven major US metropolises,

- **New York**
- Washington
- Boston
- Chicago
- Seattle
- Los Angeles
- San Francisco

and have been servicing the American market from our representative office in New York since 2018.

### Demand for real estate in the logistics growth sector

Developments in the logistics sector have been quite dynamic in the past years, especially in the courier, express and parcel segment. Due to the increasing share of e-commerce, logistics is a booming sector with high growth rates. However, the upwards trend goes hand in hand with challenges: clients do not only have increasingly higher demands regarding digital order processes, but also regarding delivery – same-day or even same-hour delivery are the key words here. Logistics service providers must be faster and more efficient in what they do, in order to fulfil the expectations of ever-shorter delivery times.

### The last-mile logistics challenge

Last-mile logistics, i.e. final delivery to the recipient, thus become a crucial task, requiring real estate which is close to the city or in the city centre, complementing the hitherto common large-scale logistics properties outside city gates with more broadly diversified concepts.

Last-mile logistics real estate could become a new, highly sought-after asset class in the years to come. pbb is intensively dealing with this development and the structuring of the “city logistics” system. At the same time, we will continue to finance traditional logistics properties.



### **E-commerce boom**

#### **4 billion deliveries**

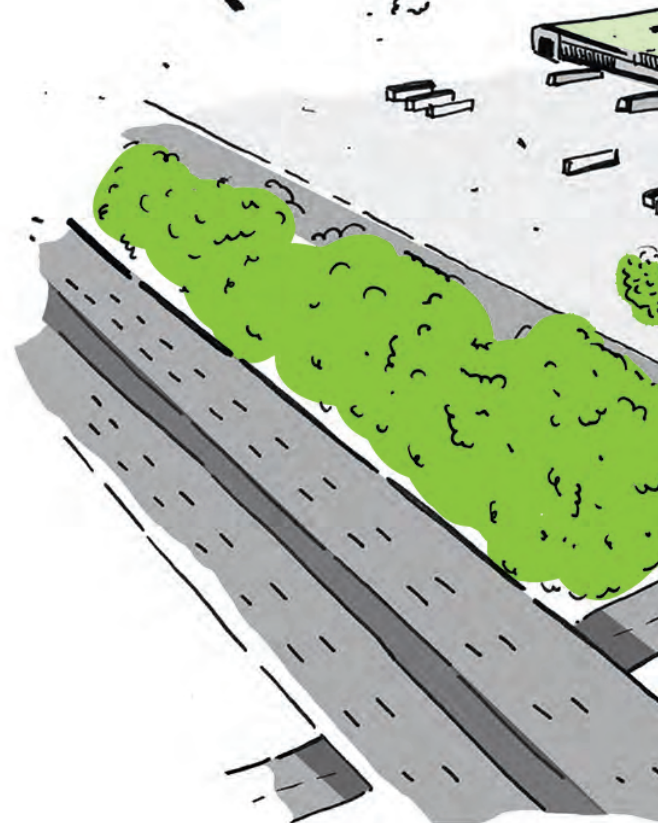
Experts anticipate the number of deliveries per year in Germany to exceed 4 billion in 2021, implying an increase of almost 1 billion compared to 2016.  
*Source: KEP-Study 2017*

#### **35 parcels per inhabitant**

That is the forecast for 2025, for the Hamburg metropolitan region alone. Overall, approximately 180 million B2C parcels would be delivered in the Hanseatic city, more than doubling delivery traffic compared to 2016.

**“In the coming years, last-mile-logistics properties could become an asset class which is in great demand.”**

Logistic centre  
**AMAZON**





**Advantageous location for logistics**  
 At Amazon, everything is set to growth – in line with this, the online shipping company is investing in a new logistics centre near Hanover.



## Logistic centre Amazon

### Hanover/Garbsen: Logistics hub for a major mail order business

The world's largest online retailer Amazon is preparing for further growth with a new logistics centre – currently the most expensive logistics property in Germany. With the important motorways A2 and A7 in close proximity, as well as Hanover airport, the Garbsen location near Hanover is ideal.

#### ▼ Financing:

- pbb provides an investment financing of €51 million for the purchase of the logistics property.
- Investment and asset management is performed by L'Etoile Group in Germany.

#### ▼ Building concept:

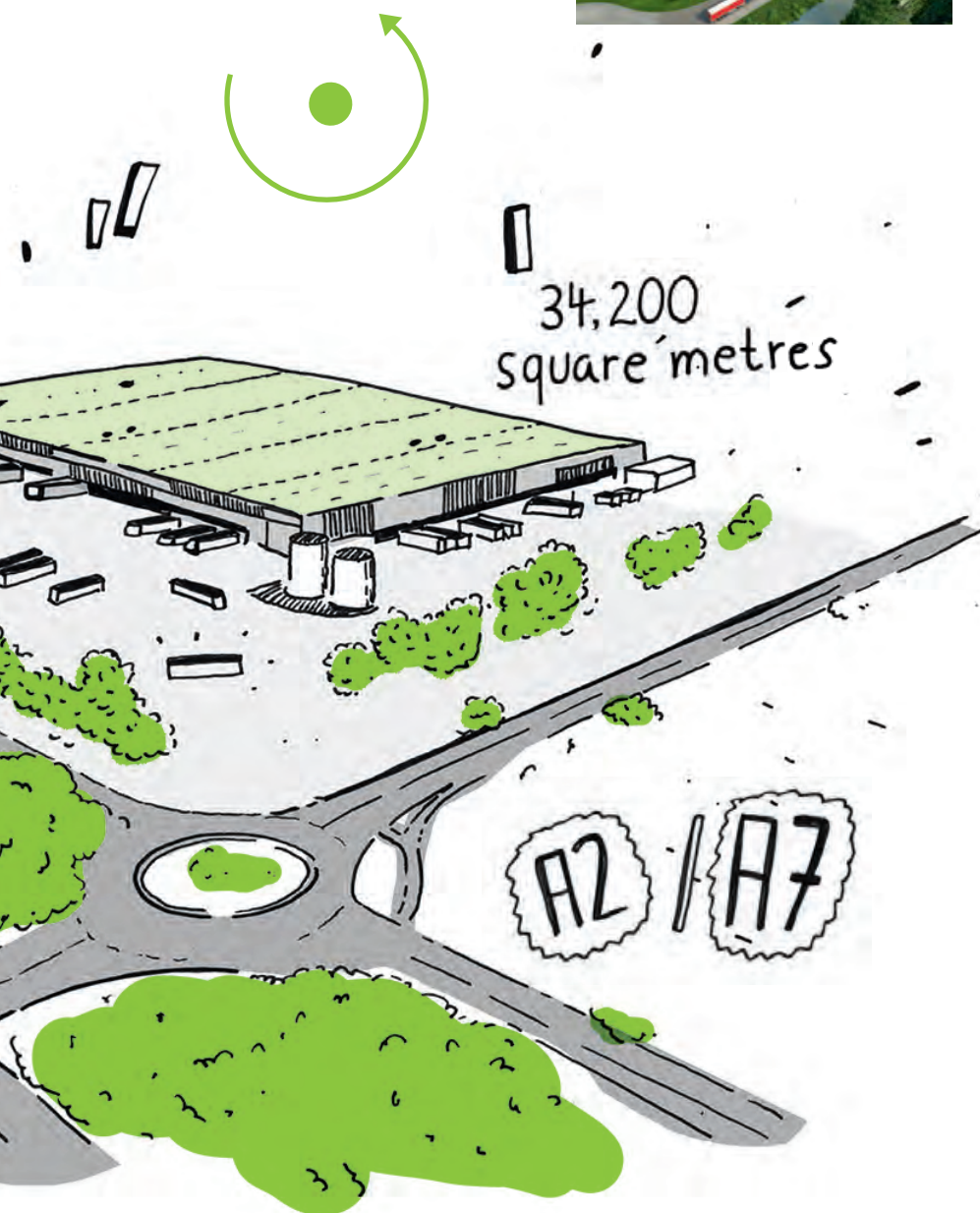
- Conveniently situated new construction, boasting the newest standards.
- The complex will comprise a warehouse with space of more than 31,000 square metres, offices, and parking spaces for lorries and passenger cars.

#### ▼ Type of use:

- Distribution centre, operating 24/7.
- Cross-docking transshipment type: the goods are pre-commissioned by the supplier or consignor – no storage, only direct reassignment.

#### ▼ Total space:

Approximately 34,200 square metres



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# To our Shareholders

## Report of the Supervisory Board

Dear shareholders,

Despite mounting global economic uncertainty and an increasingly challenging market environment, the Deutsche Pfandbriefbank Group ("pbb Group") was able to maintain its stable business development in the 2018 financial year – and, in particular, to uphold its leading market position in commercial real estate finance. In an environment that remains intensely competitive, with conditions that were more challenging overall than the previous year, we succeeded in acquiring a very good, albeit somewhat lower, volume of new business in line with forecasts, while continuing to adhere to our high risk standards. This was shown, inter alia, by the ongoing expansion of the real estate financing business in the US. The New York representative office has commenced operations, which is also reflected in a growing share of US business in the Bank's new business. In addition, we continued to advance the planned strategic digitalisation initiatives. On the one hand, subsidiary CAPVERIANT GmbH, which operates a public sector financing portal, became operational and was able to intermediate the first transactions. On the other hand, an independent "Digitalisation" division was established within the Bank, which will deal with new technologies and pbb business models. The Treasury division also proved successful in 2018, during which it extended the Bank's funding mix with a well-received €300 million issue of Additional Tier 1 (AT1) capital. All of these measures allow pbb to continuously develop in line with the changes in the markets, so as to continue to maintain scope for action and flexibility.

As always, supporting ongoing business development, the continued development of the business strategy and monitoring the associated risks were a key focus in the supervisory and advisory activities of the Supervisory Board. In addition, the Supervisory Board also concerned itself last year with identifying a successor to Dr Hedda von Wedel, whose term of office ended upon the close of 2018's Annual General Meeting. The Annual General Meeting appointed her successor Dr Jutta Dönges as shareholder representative on the Supervisory Board. The Supervisory Board also devoted particular attention in 2018 to issues concerning supervisory regulation and IT.

The Supervisory Board appointed Marcus Schulte (previously Senior General Manager) as member of the Management Board, with effect from 1 January 2019. At the end of the usual induction phase in line with the supervisory requirements, Mr Schulte was able to assume responsibility on the Management Board, as scheduled, for the Treasury portfolio and for the Portfolio Analysis and Property Valuation divisions at the start of 2019.



## CORPORATE GOVERNANCE

The Supervisory Board continuously monitored the Management Board during the financial year 2018, as in the past, and provided it with regular advice on the management of the Company.

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

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

The Supervisory Board examined the requisite independence of the external auditors of the financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft («KPMG»), instructed KPMG with the audit, and agreed the auditors' fee.

On 15 February 2019, the Supervisory Board concerned itself with the Declaration of Compliance with the German Corporate Governance Code for the financial year 2018, which is published on pbb's website (<http://www.pfandbriefbank.com/en/investor-relations/mandatory-publications/>). Please also refer to the Group's remuneration report, which is printed in this annual report. With respect to the requirements of the German Corporate Governance Code, in conjunction with section 111 (5) of the German Stock Corporation Act (AktG) concerning the target and actual quotas of female members of the Supervisory Board and the Management Board, please refer to the table outlining the composition of the Supervisory Board and its committees, and to the comments in the Corporate Governance Statement and in the Non-Financial Report.

## MEETINGS OF THE SUPERVISORY BOARD IN 2018

The Supervisory Board of pbb held eight meetings in 2018 (including three extraordinary meetings), plus an all-day strategy meeting. Its members were:

Dr Günther Bräunig (Chairman), Dagmar Kollmann (Deputy Chairman), Dr Jutta Dönges (since 21 June 2018), Dr Thomas Duhnkrack, Dr Christian Gebauer-Rochholz, Georg Kordick, Joachim Plesser, Oliver Puhl, Heike Theißing and Dr Hedda von Wedel (until 21 June 2018).

All ordinary meetings addressed the current business situation of pbb Group, which was discussed in detail with the Management Board in each case. The Management Board informed the Supervisory Board, regularly and in a timely manner, about pbb's financial situation and performance. During the ordinary meetings, the Supervisory Board also received reports on the risk position, risk management, new business, the liquidity situation and strategy, funding and share price developments, current regulatory issues and audits, as well as on significant events that were of material importance to the assessment of the Company's position, development and management.

Along with the aforementioned regular topics, the ordinary meeting on 1 March 2018 also dealt in particular with the target achievement at the institutional level as well as the variable remuneration for the members of the Management Board for the financial year 2017 and with the redetermination of their variable remuneration retained for 2016 (including penalty review and backtesting). Other key focal points of the meeting were the development of the US business, the IT project portfolio, the establishment of CAPVERIANT GmbH and the report on the examination of efficiency, with which the evaluation of the Supervisory Board and the Management Board for the year 2017 was concluded. In addition, the annual Declaration of Compliance, the Report of the Supervisory Board, the Corporate Governance Statement pursuant to sections 289f and 315d of the HGB (including the Corporate Governance Report), including a diversity concept for the Supervisory Board and the Management Board, were adopted. The Supervisory Board also concerned itself with the dividend strategy and the payout ratio for the financial year 2017.

In the accounts review meeting held on 23 March 2018, the Consolidated Financial Statements for 2017 were approved and the Annual Financial Statements for 2017 adopted. The Supervisory Board also concerned itself with the Non-Financial Report, which was to be published for the first time pursuant to sections 289b et seq. and 315b et seq. of the HGB. Moreover, the Annual General Meeting for 2018 was prepared and respective resolutions regarding the agenda, including the submitted proposed resolutions – in particular with regard to the appropriation of profit and appointment of the external auditors – were adopted. The Supervisory Board also passed a resolution for a planned AT1 issue, as a precautionary measure. Another key focus of the meeting was addressing the development and strategy of the US business, as well as structuring regular training measures for the Supervisory Board.

The meeting on 9 May 2018 was dominated by pbb Group's first-quarter report for 2018. The Supervisory Board also discussed the 2017 Remuneration Reports as well as the Variable Remuneration Plan for 2018. It was also informed about the status of implementation of CAPVERIANT GmbH, which was in the process of being established, the current status vis-a-vis Brexit, and the plans for implementing the German Regulation on Remuneration in Financial Institutions (InstVergV) 3.0.

In an extraordinary conference call held on 22 May 2018, the Supervisory Board advised on the consequences of the partial sale of the federal government's indirect shareholding in pbb (indirectly via the Financial Market Stabilisation Fund – FMS and Hypo Real Estate Holding GmbH) and, in light of this, again on its proposal for electing a shareholder representative to the Supervisory Board to be submitted to the Annual General Meeting.

Following the Annual General Meeting, a decision was reached in the meeting held on 21 June 2018 on appointments to the Supervisory Board's committees after the election of Dr Jutta Dönges to the Supervisory Board.

During its meeting on 10 August 2018, the Supervisory Board discussed pbb Group's interim report and Management Report as at 30 June 2018, and the review of the six-month financial statements by the external auditors. It also resolved in part on the implementation of InstVergV 3.0 within the Bank and concerned itself with the new requirements of the EBA guidelines on internal governance, and with the suitability of members of the Management Board and key personnel.

On the basis of the debates in the course of its annual strategy meeting on 26 October 2018, the Supervisory Board on 9 November 2018 initially discussed pbb Group's results for the third quarter of 2018 and then adopted the corporate planning and the business strategy presented by the Management Board, each for the financial years 2019–2021, as well as the IT and risk strategy for 2019. The Supervisory Board also prepared the examination of efficiency for the Management Board pursuant to section 25d (11) of the KWG, and determined the parameters for the risk-adjusted performance measurement at the institutional level, as well as targets for the Management Board for the financial year 2019. Approval was also granted for identifying the risk takers, for assessing the appropriateness of the remuneration system and on further dealings with InstVergV 3.0, including amendments to

the Rules of Procedure of the Remuneration Committee. Against the background of the new EBA guidelines, a suitability policy, a framework directive on internal governance and the revised Rules of Procedure for the Supervisory Board and all its committees were also resolved. The Supervisory Board also appointed Marcus Schulte – subject to the necessary supervisory approval – as a member of the Management Board with effect from 1 January 2019 and subsequently approved the change in the Allocation of Responsibilities for the Management Board. Finally, the Supervisory Board was also informed about the current state of affairs in relation to Brexit and concerned itself in depth with the Estate UK 3 securitisation transaction.

In an extraordinary conference call on 17 December 2018, the Supervisory Board approved the specifications and editorial changes to the business and risk strategies valid as of 2019 and adopted the points on the implementation of the amendments to the InstVergV (clawback) that were still outstanding.

## SUPERVISORY BOARD COMMITTEES

During the period from 1 January to 31 December 2018, pbb's Supervisory Board maintained an Executive and Nomination Committee, an Audit Committee, a Risk Management and Liquidity Strategy Committee, as well as a Remuneration Committee.

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

The committee concerned itself with strategic and current regulatory issues, as well as with matters concerning the Management Board, for which it prepared corresponding proposals for the plenary meeting. These primarily involved the achievement of the Management Board members' targets, as well as the determination of their variable remuneration for the financial year 2017 (including the penalty review and backtesting for 2016). The committee also prepared the 2018 examination of efficiency for the Management Board as well as the Supervisory Board (including its committees); it informed the Supervisory Board about new corporate governance topics in accordance with the Rules of Procedure and concerned itself with the Corporate Governance Statement in accordance with sections 289f and 315d of the HGB (including the Corporate Governance Report and Declaration of Compliance with the German Corporate Governance Code). The Executive and Nomination Committee also concerned itself with the implementation of the EBA guidelines on internal governance and the suitability of the members of the Management Board. Within the scope of two conference calls, the committee also advised and decided – on the basis of passing of the resolution and delegation by the Supervisory Board on 23 March 2018 – on the issuance of an AT1 bond.

The **Audit Committee** held five meetings; it consisted of Dagmar Kollmann (Chairman), Dr Günther Bräunig, Dr Jutta Dönges (since 21 June 2018), Dr Thomas Duhnkrack and Dr Hedda von Wedel (until 21 June 2018).

During its meetings, the committee reviewed and discussed the Annual Financial Statements and Consolidated Financial Statements for 2017, the interim reports (or statements) of 2018, and the reports by Internal Audit and external auditors KPMG on internal and external audit findings. In addition, the Audit Committee discussed the effects of current regulatory issues with the Management Board, and was informed of the development of ongoing audits. The Audit Committee also concerned itself with the mandate for the external auditors and their audit plan for the 2018 financial year. Furthermore, the Audit Committee satisfied itself concerning the independence of the external auditors, and recommended to the Supervisory Board to propose to the Annual General Meeting to elect KPMG as external auditors for the 2018 financial year. In addition, the Audit Committee discussed in detail the review of the Compliance organisation, the UK 3 securitisation transaction, the dividend strategy as well as the amendments to the Rules of Procedure of the Audit Committee. With regard to current regulatory issues and supervisory audits, the Audit Committee was informed

by the Management Board concerning, inter alia, IFRS 9, the revision of the Basel III framework, IRBA models, the IT audit carried out by the ECB and the SREP stress test. Furthermore, regular reports were received on the Internal Control System and the monitoring of key controls implemented, current litigation, Compliance issues, data protection and IT security, notable accounting issues, the results of external audits, as well as the audit plan established by Internal Audit and its implementation.

The early preparation of the required rotation of external auditors – owing to new EU-wide requirements – represented a key focus of the work of the Audit Committee. pbb is required to change its external auditors for the 2021 financial year at the latest. Accordingly, a public tender procedure for the selection of the external auditors was launched in 2018. The selection procedure is being supported by a pbb project team. In addition to the regular consultation in the Audit Committee on the tender process, two separate workshops were also held for this purpose with the project members and the Audit Committee Chairman. The selection process thus meets the requirements of a fair, transparent and non-discriminatory procedure. The announcement of the tender procedure in the German Federal Gazette (Bundesanzeiger) was followed by a call for auditing firms to express their interest in participating in the selection process. The interested parties were then provided with additional detailed information and given the option to clarify any questions within the scope of a Q&A process. Furthermore, every company had the opportunity to present their services as well as their prospective responsible auditors in person. The auditing firms still involved in the process submitted their offers on this basis in December 2018. These will now be reviewed and discussed in the Audit Committee meetings during the first quarter of 2019.

The **Risk Management and Liquidity Strategy Committee** convened for five ordinary meetings. It also discussed credit exposures requiring Supervisory Board approval, usually during monthly conference calls. The committee consisted of Joachim Plessner (Chairman), Dr Günther Bräunig (until 21 June 2018), Dr Jutta Dönges (since 21 June 2018), Dagmar Kollmann (since 21 June 2018), Oliver Puhl and Dr Hedda von Wedel (until 21 June 2018).

The committee supported the Supervisory Board's supervision of risk management and liquidity management; it reviewed the Management Board's risk reporting, and was involved in the credit approval process to the extent laid down in the Rules of Procedure. The committee also regularly discussed new business developments as well as the liquidity and funding status and syndication business. During 2018, the committee also concerned itself with reports on sub-portfolios (including development financings); it dealt with foreclosures, specific allowances, the reporting of own funds in accordance with the German Solvency Regulation, country limits, and asset/liability management. The committee also dealt with pbb's recovery plan, the IRBA models, developments on the real estate markets to be expected in the medium term, the updated risk strategy, and the Rules of Procedure of the Risk Management and Liquidity Strategy Committee.

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

The **Remuneration Committee** held five meetings (including one extraordinary conference call); it consisted of Dr Günther Bräunig (Chairman), Dagmar Kollmann, Joachim Plessner and Heike Theißen.

The committee concerned itself with the remuneration reports, the variable remuneration for the financial year 2017, the target agreements and achievements for the Management Board members as well as the Variable Remuneration Plan 2018 for the Board of Managing Directors. Furthermore, the committee prepared the approval of the determination of risk-taker functions, and the determination of parameters for the risk-adjusted performance measurement at the institution level, for the Supervisory Board. Other key focal points of the meetings were the Bank's remuneration system, including the assessment of its appropriateness, as well as regulatory changes – specifically, regarding the implementation of the InstVergV, which was comprehensively amended in 2017, including the necessary changes to the service contracts of Management Board members – and the change of the Deputy Remuneration Officer.

### Supervisory Board of pbb

		Committee function and meeting attendance				
Name and place of residence	Principal activity	Supervisory Board function and meeting attendance	Executive and Nomination Committee	Audit Committee	Risk Management and Liquidity Strategy Committee	Remuneration Committee
<b>Dr Günther Bräunig</b> Frankfurt/Main, Germany	CEO of KfW	Chairman 8 of 8	Chairman 5 of 6	Member 5 of 5	Member (until 21.6.2018) 3 of 3	Chairman 5 of 5
<b>Dagmar Kollmann</b> Vienna, Austria	Entrepreneur	Deputy Chairman 8 of 8	Member 6 of 6	Chairman 5 of 5	Member (since 21.6.2018) 2 of 2	Member 5 of 5
<b>Dr Jutta Dönges</b> Frankfurt/Main, Germany (since 21.6.2018)	Member of the Executive Board Bundesrepublik Deutschland – Finanzagentur GmbH	Member 4 of 4		Member 2 of 2	Member 2 of 2	
<b>Dr Thomas Duhnkrack</b> Kronberg/Taunus, Germany	Entrepreneur	Member 8 of 8		Member 5 of 5		
<b>Dr Christian Gebauer-Rochholz</b> Hochheim, Germany (Employee representative)	Bank employee	Member 8 of 8				
<b>Georg Kordick</b> Poing, Germany (Employee representative)	Bank employee	Member 7 of 8				
<b>Joachim Plessner</b> Ratingen, Germany	Consultant	Member 8 of 8	Member 5 of 6		Chairman 5 of 5	Member 5 of 5
<b>Oliver Puhl</b> Frankfurt/Main, Germany	Entrepreneur	Member 7 of 8			Mitglied 4 of 5	
<b>Heike Theißing</b> Munich, Germany (Employee representative)	Bank employee	Member 8 of 8				Member 5 of 5
<b>Dr Hedda von Wedel</b> Andernach, Germany (until 21.6.2018)	President of the Bundes- rechnungshof (retired)	Member 4 of 4		Member 3 of 3	Member 3 of 3	

### TRAINING AND CONTINUOUS PROFESSIONAL DEVELOPMENT

The members of the Supervisory Board assumed responsibility for undertaking any training or professional development measures necessary to fulfil their duties. The Company supported them to the extent required in this regard. Since the second half of 2018, regular training is also provided ahead of the orderly Supervisory Board meetings through presentations by external and internal speakers. In 2018, the topics of IT risk/IT security and InstVergV 3.0, among others, were also addressed, as well as the current developments and structural changes in the relevant real estate markets within the scope of the Supervisory Board's annual strategy meeting. This regular training programme for the entire Supervisory Board will be continued.

## ANNUAL FINANCIAL STATEMENTS

KPMG, the auditors of the annual and consolidated financial statements elected by the Annual General Meeting, audited the annual and consolidated financial statements of pbb as at 31 December 2018, including the consolidated management reports, and issued them with unqualified audit opinions. The Non-Financial Statement, which pbb is required to submit as part of the Management Report pursuant to sections 315b and 289b of the HGB, was published in a separate Non-Financial Report included in the present Annual Report. In the context of its audit obligation as per section 171 (1) of the German Stock Corporation Act (AktG), the Supervisory Board made use of the possibility of a content-related external audit of the non-financial statement according to section 111 (2) sentence 4 of the AktG, carried out by KPMG in the course of a separate appointment.

KPMG has submitted a declaration of its independence to the Supervisory Board. The financial statements documents and audit reports were submitted to all Supervisory Board members in good time. The Audit Committee addressed the financial statements documents in its meeting on 21 March 2019. The Annual Financial Statements and Consolidated Financial Statements, the Combined Management Report as well as audit reports were discussed in detail with the Management Board and representatives of the external auditors. Following its own review, the Supervisory Board did not raise any objections to the audit results submitted by the external auditors. In the accounts review meeting held on 21 March 2019, the Supervisory Board approved the Consolidated Financial Statements prepared by the Management Board, and the Annual Financial Statements were adopted. During the same meeting, the Supervisory Board also discussed the Management Board's proposal for the appropriation of profits with the Management Board. Following its examination, the Supervisory Board has endorsed the proposal for the appropriation of profit submitted by the Management Board.

The Supervisory Board would like to thank the Management Board, and all staff, for their strong personal commitment and successful contribution during the financial year 2018. The Board would also like to thank Dr Hedda von Wedel, who retired from the Supervisory Board in mid-2018, for her great commitment and for the great service she gave to pbb and wish her all the very best for the future.

For the Supervisory Board

**Dr Günther Bräunig**  
Chairman

# The pbb Share

Deutsche Pfandbriefbank AG shares (pbb) are listed in the Prime Standard of the Frankfurt Stock Exchange (FWB), and included in the MDAX<sup>®</sup> index. Thus, pbb shares belong to the 60 largest companies – below the constituents of the DAX<sup>®</sup> – within the Prime Standard of the FWB.

## Basic information

As of 31 December 2018

WKN (German Securities Code)	801900
ISIN	DE0008019001
Class of shares	Ordinary bearer shares with no par value
Number of ordinary shares	134,475,308
Exchange mnemonic	PBB
Stock exchange	Xetra, Frankfurt
Stock segment	Regulated market, Prime Standard
Index	MDAX <sup>®</sup> (since 21 September 2015)
Initial listing	16 July 2015

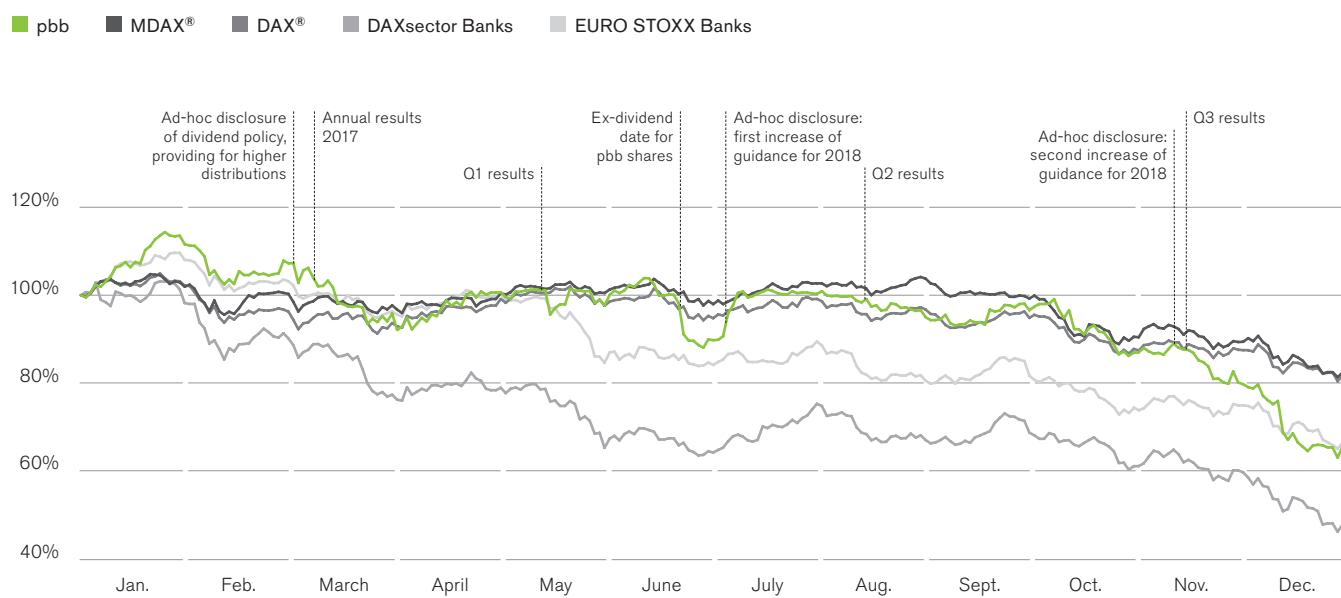
A total of 134,475,308 ordinary shares have been issued. The free float is 100%. In May 2018, the German Financial Markets Stabilisation Fund (Finanzmarktstabilisierungsfonds – “FMS”), which is managed as a special fund under public law by Bundesrepublik Deutschland Finanzagentur GmbH, reduced its stake in pbb, held via Hypo Real Estate Holding GmbH, from 20% to 3.5%. The shares were sold to institutional investors by means of a so-called accelerated book-building process. According to FMS, it wants to maintain its remaining 3.5% stake in pbb over a medium- to long-term horizon.

## SHARE PRICE PERFORMANCE 2018

### Shares of Deutsche Pfandbriefbank AG

#### Benchmark comparison 2018

indexed as of 29 December 2017



Source: Reuters

Equity markets were strongly affected by monetary, geopolitical and economic uncertainty throughout 2018. While the major indices remained relatively stable in the first half of 2018, the bank indices for Germany and Europe recorded significant price declines. Alongside interest fears and Brexit, the budget dispute between Italy and the EU and the trade dispute between the USA and China – with consequences for global economic forecasts – had negative impact on share prices, especially in the second half of the year. Significant price losses were seen.

The pbb share was at first able to largely escape the negative banking trend; however, in the fourth quarter of 2018, the share price also recorded significant declines. After a positive share price development at the beginning of the year, with a peak of €15.28 reached on 24 January 2018, the price fell back to the year's starting level by the end of the first quarter. This was followed by a phase of sideways movement, which lasted until early October 2018. The mark-down caused by the dividend payment on 22 June 2018 was made up within two weeks, supported by the first increase in guidance for pre-tax profit for the 2018 financial year, published on 4 July 2018. In the fourth quarter the pbb share was no longer able to escape the general downward trend, despite a further increase in its guidance, based on good results for the third quarter of 2018. Following increased losses, the share reached its low for 2018 of €8.42 on 27 December 2018.

The year-end closing price of the pbb share was at €8.74 (a 34.6% decline for the year). This means that the pbb share outperformed the relevant German sector index DAXsector Banks (which showed a decline of 52.3%) and was almost on par with the European sector index EURO STOXX Banks (with a decline of 33.6%). Compared to the broad German indices MDAX® (down 17.6%) and DAX® (down 18.3%) the pbb share showed underperformance.



<b>Key figures</b>		<b>2018</b>	<b>2017</b>
Share prices <sup>1)</sup>			
Year-end closing	in €	8.74	13.36
High	in €	15.28	13.88
Low	in €	8.42	9.11
Market capitalisation <sup>2)</sup>	in € million	1,175	1,797
Free-float market capitalisation <sup>2)</sup>	in € million	1,175	1,437
Book value per share <sup>3)</sup>	in €	22.00	21.25
Earnings per share <sup>4)</sup>	in €	1.24	1.35
Dividend per share	in €	1.00 <sup>5)</sup>	1.07
Price/earnings ratio <sup>2)4)</sup>	in %	7.05	9.90
Dividend yield based on the year-end share price <sup>2)3)</sup>	in %	11.4	8.0
Dividend yield based on the annual average price <sup>6)</sup>	in %	7.9	9.1

<sup>1)</sup> Xetra closing prices.

<sup>2)</sup> Xetra year-end closing price.

<sup>3)</sup> Based on equity attributable to shareholders.

<sup>4)</sup> Based on net income/loss attributable to the ordinary equity holders.

<sup>5)</sup> Proposal for financial year 2018 to be submitted to the Annual General Meeting.

<sup>6)</sup> Volume weighted daily Xetra closing prices.

## CAPITAL MARKETS COMMUNICATIONS

pbb attaches great importance to the capital market's need for information. In 2018, Investor Relations (IR) continued to focus its activities on stabilising and broadening pbb's analyst and investor base. pbb maintained an intensive, open and transparent capital markets communication by holding a regular series of talks with numerous analysts and investors. The IR team organised numerous roadshows, and investment conferences were visited. The focus was on the international financial centres Frankfurt, London and New York, but also on smaller European financial markets.

In the context of the publication of the annual results 2017, pbb held an analysts' conference in March 2018. Conference calls for analysts were also held to present the interim results for the first, second and third quarters of 2018. During each of these calls, the Management Board explained the results in detail, informed about current developments and (with the annual results) provided a strategic outlook.

## INFORMATION FOR ANALYSTS

Research and comments from brokerages and analyst firms are important information sources for investors, which is why pbb devotes considerable attention to financial analysts. As of 31 December 2018, pbb was covered by eleven brokerage and analyst firms. These included six "buy" recommendations, four "neutral" recommendations and one "sell" recommendation. pbb publishes analysts' current recommendations on its website.

## ANNUAL GENERAL MEETING

pbb's Annual General Meeting was held on 21 June 2018, in Munich. The Management Board and Supervisory Board gave an extensive overview of the business development in 2017, of the first quarter of 2018, and provided an outlook for the financial year 2018. 62.4% of the share capital was represented.

During the meeting, the shareholders elected Dr Jutta Dönges to the Supervisory Board. Dr Dönges took over the mandate of Dr Hedda Wedel, whose term of office ended upon the close of 2018's Annual General Meeting. Moreover, the General Meeting approved the remuneration system for the Members of the Management Board. The shareholders also approved the proposal from the Management Board and the Supervisory Board to use the net retained earnings 2017 (amounting to €143,888,579.56) for the distribution of a dividend of 1.07 per ordinary bearer share with no par value entitled to a dividend. All the other items on the agenda were also agreed upon.

pbb publishes the detailed voting results and further documentation concerning the Annual General Meeting on its website.

## DIVIDEND POLICY

The dividend policy of pbb provides for a payout ratio of 75% for the 2017–2019 financial years, which is composed of 50% regular dividend plus 25% special dividend, based on consolidated profit after taxes and minority interest income, in accordance with International Financial Reporting Standards (IFRS), attributable to ordinary shareholders. The dividend policy is subject to a regular review in the context of legal and regulatory requirements, as well as in terms of commercial viability.

On 7 June 2019, the Management Board and the Supervisory Board will propose to the Annual General Meeting a dividend distribution of €1.00 per share for 2018. This is equivalent to a dividend payout ratio of 81% on the consolidated profit after taxes, in accordance with IFRS, attributable to ordinary shareholders (€1.24 per share) This equates to a dividend yield of 7.9%, based on the annual average price (volume-weighted daily Xetra® closing prices), and 11.4% based on the Xetra® year-end closing price of €8.74.

# Combined Management Report

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### **Information due to rounding**

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

# Fundamental Information about the Group

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

## GROUP STRUCTURE

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

In addition to the Bank's headquarters in Munich/Unterschleissheim, pbb Group has offices at four locations across Germany. In its foreign core markets, pbb maintains a presence at five locations: London, Madrid, Paris, Stockholm, and New York City, from where the Bank operates the majority of its international financing activities.

### Sales locations

as of 31 December 2018



## BUSINESS MODEL AND STRATEGY

The strategic business segments of pbb Group are Real Estate Finance (REF), supplemented by Public Investment Finance (PIF); the focus is on business eligible for inclusion in Pfandbrief cover. The geographic focus is on Europe. Its significant core markets are Germany, France, the United Kingdom, the Nordic countries and selected Central and Eastern European countries, as well as Spain, the Benelux countries and the US. Besides the secondary markets business conducted in the US, pbb plans to gradually expand its primary markets business, following the opening of its New York Representative Office in 2018. While pbb regularly reviews business opportunities outside the markets it serves, it remains committed to its core markets.

Lending is pbb's core business: pbb Group plays an important role in this area, supplying credit to the real estate sector and supporting the public sector with project financings for the provision and improvement of public infrastructure. pbb Group's focus is on primary client business. Besides traditional financing solutions tailored to clients' needs, the Group offers its clients derivatives for hedging risks associated with lending. pbb does not maintain a trading book for securities or derivatives portfolios held to realise short-term gains.

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

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

In the course of its digitalisation strategy, pbb Group launched the digital platform CAPVERIANT on the German market in 2018. CAPVERIANT is designed to bring together borrowers and investors in the public investment finance sector, with a focus on the intermediation of budget financing solutions for public-sector authorities. In this context, pbb Group does not act as a lender but purely as an intermediary. Market entry in France is planned for 2019.

pbb Group intends to further advance its digital transformation: its chosen approach comprises three main thrusts, focusing on further development of client interfaces, enhancing process efficiency, as well as on new products and business models. To further pursue pbb Group's digital transformation, both effectively and efficiently, the Group established a separate Digitalisation division in 2018.

Over the course of the past few years, pbb Group revised – and thus considerably simplified – its IT landscape. Based on this modernisation, besides ongoing professional development (including as part of the digitalisation strategy), in the future pbb Group will invest in certain sector-specific regulatory topics such as protection requirement analysis, outsourcing and user authorisation management – as well as in the move of its IT centre.

## COMPETITIVE POSITION

In Commercial Real Estate Finance, pbb Group is one of the leading finance providers in its target markets and segments. In its core markets, pbb Group possesses a strong local presence and expertise across the entire process chain, providing or having access to real estate experts, property law specialists and financing experts, up to the management of loan exposures. pbb Group also actively deploys this local expertise to support clients with international transactions.

To further strengthen its competitive position, pbb launched its "Focus and Investment" initiative in 2018. The objective of this initiative is to further sharpen the focus of pbb's processes and strategic position, with a view to creating opportunities for additional investments into pbb's future – and hence, into new tasks and jobs. In this context, pbb has reorganised its PIF business, and will be centralising certain functions, moving them from other locations to its Unterschleissheim head office. The investment programme – which has already started – currently focuses on a moderate expansion of the US business, and on the ongoing digital transformation.

### Strategic portfolios

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

In Public Investment Finance, pbb Group finances projects for the provision and improvement of public infrastructure. Clients in this segment include regional or provincial governments, municipalities, urban development companies, and publicly-owned hospitals – as well as investment or real estate holding companies. Public/private partnerships and other structured transactions also play a role in this segment, given their close proximity to the REF business. The regional focus is on primary new business in France. The Group diversifies its portfolio with long-term publicly guaranteed export financings hedged by public export-credit insurers (Export Credit Agencies). Depending on the structure of the respective export credit guarantee, the Group retains a portion of credit risk, which normally does not exceed 5%–15% of the credit risk exposure. Finally, this segment also comprises bond purchases, including (in particular) for the purposes of managing cover assets pool and the Group's liquidity. In view of increasingly apparent public-sector reticence regarding (privately financed) infrastructure investments, and against the background of a further deterioration in public investment financing margins, pbb Group has decided to refrain from its previous assumption of further growth. Instead, the Group will maintain the portfolio on a 'hold' basis whilst restructuring this business.

## Run-down portfolio

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

## Funding

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

pbb Group issues Mortgage Pfandbriefe and Public Sector Pfandbriefe, and is one of the largest issuers of Pfandbriefe (measured by outstanding volume). The Pfandbrief market is highly liquid, with a broad investor base. It is the second-largest market for fixed-income securities in Germany, after the market for public-sector bonds. The main vehicles used for unsecured funding are promissory notes, bearer bonds, and fixed-rate deposits. Since the corresponding legal framework has been established in Germany in July 2018, unsecured funding is possible – subject to contractual documentation – also in 'senior preferred' form (currently rated A– by Standard & Poor's ("S&P")), besides the previous 'senior non-preferred' form (BBB– by S&P).

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

In addition, the Group is active in the retail deposit-taking business with private investors in Germany. Via its pbbdirekt.com platform as well as through third-party providers, pbb Group offers overnight and fixed-term deposits denominated in euros and US dollars with various maturities. Since August 2017, pbb Group has offered selected fixed-term deposits on an external platform of a third-party provider as well. This enables clients of selected other banks to easily and quickly invest in fixed-term deposits at pbbdirekt.com, without having to open an account with pbb.

## STRATEGIC FOCUS

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

The Management Board has committed itself to further strengthen profitability in 2019. Besides the continued expansion of sales activities in the US real estate finance market, pbb Group pursues various initiatives in order to broaden its value creation chain as well as its client groups – also within the framework of digitalisation. Furthermore, pbb Group will not only examine further digitalisation opportunities of its business – especially in the real estate financing segment – but will also constantly review the options available to increase its process and cost efficiencies.

## INTERNAL MANAGEMENT SYSTEM

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

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

The internal management system has remained largely unchanged compared to the previous year: changes were made regarding the financial key performance indicators "notional value of financings" and "new business volume". Non-financial key performance indicators are not explicitly managed. The following financial key performance indicators have been defined:

- > One key profitability indicator is the return on equity after tax. It is calculated by dividing IFRS net income/loss by the average IFRS equity available in the financial year excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI (IAS 39: AfS reserve) and additional equity instruments (AT1 capital). Profit or loss before tax is a further financial key performance indicator. The aim is to increase it both by generating higher revenues and through strict cost discipline. Cost discipline and efficiency are monitored using the cost-income ratio, i.e. the ratio of general and administrative expenses to operating income.



- > The notional amount of the funding in the Real Estate Finance (REF) segment is a significant factor influencing the future earning power and has therefore been redefined as an additional financial key performance indicator. The financing volume can be controlled, above all, by the volume of new business (including prolongations with maturities of more than one year), which also represent a financial key performance indicator. A present value approach is used for managing and calculating new business. Given the changed focus in business activities implemented during the year under review, the nominal volume of financings extended in the Public Investment Finance (PIF) segment, and the associated volume of new business, are no longer used as financial performance indicators.
- > pbb Group's capital adequacy process (ICAAP) is based on two approaches concerning risk-bearing capacity: the normative and the economic perspective. Whilst the normative perspective is aimed at the fulfilment of all capital-related legal requirements, supervisory demands and internal objectives, on an ongoing basis, the economic perspective covers all material risks which might threaten the institution's economic viability. Both perspectives are designed to supplement each other, safeguarding pbb Group's ability to survive. The prerequisites for evidencing risk-bearing capacity in the normative perspective are the ongoing compliance with minimum regulatory requirements over a medium-term horizon, plus evidence of adequate internal capital to cover material risks exceeding such minimum requirements. In the economic perspective, risk-bearing capacity is evidenced by sufficient internal capital being available to cover potential present-value losses. Details concerning the methodology used for analysing risk-bearing capacity, and the results obtained, are provided in the Risk and Opportunity Report.
- > The CET1 ratio, a key management parameter, is determined on a regular basis; it is calculated by dividing Common Equity Tier 1 (CET1) by risk-weighted assets (RWAs). The Advanced Internal Rating Based Approach (Advanced IRBA) is used to determine regulatory capital requirements for all material portfolios.

## NON-FINANCIAL STATEMENT

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

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

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

# Report on Economic Position

## MACROECONOMIC ENVIRONMENT

2018 saw the global economy continue to recover. However, momentum slowed unexpectedly over the course of the year. This slowdown was due, among other things, to increasingly protectionist tendencies. The increase in the value of the US dollar against most currencies had a negative impact on economic growth in the emerging economies while the higher political uncertainty in Europe also proved to be a negative factor.

According to the IMF, the 2018 growth rate of the industrialised (“advanced”) economies stood at 2.3%, remaining stable as against the previous year. Within the group of industrialised nations, however, the pace of growth was unevenly spread. While the US turned in an extremely pleasing performance with the help of fiscal measures, growth in the euro area and the United Kingdom in particular was disappointing.

The unequal distribution of the economic momentum in the industrialised nations illustrates the special role that the United States plays. While US growth accelerated from 2.2% in 2017 to a likely 2.9%, the increase expected by the IMF in the gross domestic product of the euro area and in the United Kingdom slowed by 0.6 or 0.4 percentage points to 1.8% and 1.4%, respectively. In most of the countries, growth was primarily driven by domestic demand and was helped by a very low unemployment rate: the euro area recorded its lowest level in 10 years in November 2018 when it fell to 7.9%.

In the euro area, Germany is expected to see its economic output for 2018 rise by 1.5%, following an increase of 2.5% in 2017. This is due in part to an exceptional situation in the automotive sector which saw new exhaust emissions standards have a disproportionately high impact on the third quarter, and led to economic output dipping 0.2%. France is estimated to have grown just 1.5%, down on 2.3% in 2017. Its economic growth was hit among other things by protests against the French government in spring and again at the end of the year. Only 1.0% is predicted for Italy, down 0.6 percentage points on the previous year. Increased political uncertainty following the parliamentary elections in March and the conflict between the government and the European Commission in particular proved to be negative factors. Spain is expected to record an increase of 2.5%, having seen its economy expand at least 3% in the last three years.

According to the latest projections, pbb Group's key markets of Northern and Eastern Europe as well as North America have developed solidly. The expected growth for Sweden of 2.4% is 0.3 percentage points higher year-on-year. The US economy is set to expand 2.9% on the back of a strong labour market and a procyclical fiscal policy.

The British economy's growth rates fell slightly over the course of the year. Private demand suffered amidst the uncertainty surrounding the outcome of negotiations to withdraw from the EU. The negotiations have proven to be extremely tough and the British parliament's vote on the outcome of the negotiations originally planned for December 2018 were postponed until the new year due to the foreseeable rejection. Overall, the United Kingdom is expected to see a growth rate of a mere 1.4% after having recorded economic growth of 1.8% the year before.

The European Central Bank (ECB) decided to gradually reduce the monthly scope of its bond-buying programme, and to phase it out altogether by the end of 2018. The Federal Reserve raised its key interest rates by 0.25% in each quarter of 2018 to 2.5%. The central bank highlighted the sound growth of the American economy and signalled in December that the interest rate level was no longer far removed from the level considered neutral. The Bank of England increased its base rate in August by 0.25% to 0.75%, and expects a restricted and gradual tightening of monetary policy. In November, prices only increased by 2.3% following an increase in the inflation rate to over 3% in the course of 2017.

Despite the less expansive monetary policies, capital market rates in both the USA and the United Kingdom as well as the euro area remained relatively subdued in 2018, and primarily close to their prior-year levels. Italy was in an exceptional situation. Against the background of a dispute between the Italian government and the European Commission, 10-year yields peaked at over 3.5%, the highest level since 2014. A compromise that led in December to a draft budget being accepted by the Commission has defused the situation for the time being.

On the currency markets, pound sterling lost 1.1% against the euro over the course of the year. The US dollar gained 4.7% against the European single currency, supported by the Federal Reserve's monetary policy, the significantly stronger economic trend and increased political uncertainty in Europe.

Sources: Bloomberg, European Commission, ECB, IMF, World Bank

## SECTOR-SPECIFIC ENVIRONMENT

### Overall Situation in the Banking Sector

The European banking sector further improved its overall capital position in 2018. At the same time, non-performing loans decreased further, from 4.1% of the total portfolio at the end of 2017 to 3.4% in the third quarter of 2018. However, many banks are still concerned about the operating environment. Profitability is restricted by fierce competition, particularly in countries with a high banking density. Furthermore, interest income remains subdued given the continued low interest rate environment and regulatory costs.

Sources: Bloomberg, ECB

### Real Estate Finance

The persistent low-interest rate environment continued to benefit real estate compared with other asset classes. In particular, the investment needs of professional investors such as pension funds and other institutional investors like insurance companies remained at a very high level. Investors continued to focus greatly on real estate, with the result that the transaction volumes in 2018 in both Europe and the US were once again well above long-standing historical averages. Unwillingness to sell properties of good to excellent quality, which reduced supply while returns fell at the same time, prevented even higher volumes. Current (geo)political uncertainty did not seem to majorly influence real estate investor activity.

At approximately €177 billion, transaction volumes for commercial real estate in Europe during the first nine months of 2018 remained almost unchanged against the previous year's record level of €179 billion (source: BNP "At a glance Q3 2018: Main Investment Markets in Europe").

The German real estate market was one of the contributing factors to this trend. Investment turnover amounted to a sound €43 billion as at 30 September 2018, up over 8% again on the excellent figure reported in the previous year (source: BNP "At a glance Q3 2018: Investment Market Germany"). This strong investor interest was also reflected in yield developments, as top locations in particular saw net prime yields for office properties slide once again.

Overall, many investors in Europe and the US simply adhered to their investment strategy, which led to rising prices for established locations and property types. At the same time, the search for attractive alternatives offering higher yields also fuelled markedly higher demand for properties outside the established locations and usage types. In this context, investor demand for project developments also increased noticeably throughout Europe.

The high transaction volumes had a positive impact on the development of new business amongst financing banks as well as non-bank lenders. However, competitive pressure on margins and credit terms remained high, even though margins stabilised at a low level to some extent.

### Public Investment Finance

As the European Commission stated in its autumn forecast, the share of public sector investments in 2017 in the euro area remained at an all-time low of 2.6% of gross domestic product. The Commission expects to see growth of 3.3% in 2018 – and hence, an increase in the share of public sector investments to 2.7%. This would still be a lot less than before the financial crisis when the share between 2000 and 2007 averaged 3.2%. Public-sector investments benefit from the payout of funds under EU funding programmes and the Investment Plan for Europe, which is backed by the European Investment Bank. On the other hand, the EU's fiscal rules and budgetary constraints at local body and regional levels limit the public sector's opportunities to significantly extend its expenditure.

### Value Portfolio

The non-strategic Value Portfolio (VP) segment almost exclusively comprises public budget financing exposures. In 2018, the credit spreads of countries on the European periphery widened. Italy's credit spread in particular saw a significantly negative trend in the second half of 2018. In particular, this development made any sales from the Italian portfolio look unappealing in 2018.

### Funding Markets

The capital markets in 2018 were driven by central bank monetary policies as well as political uncertainty. Against the background of a sound economy and to further normalise monetary policy, the US Federal Reserve raised its interest rates on several occasions. Despite uncertainty surrounding the future development of the US economy, it raised its Fed Funds rate most recently in December 2018, to a range of between 2.25% to 2.50%. By contrast, the Bank of England only made one interest rate move in 2018 and increased its key interest rate in August 2018, to 0.75%.

In the euro area, the ECB gradually withdrew from its bond-buying programme which led to a noticeable widening of financing spreads in the course of the year. The inflation rate of just under 2% that the ECB was striving for was essentially reached in 2018 but the key interest rate, which has been 0% since March 2016, remained unchanged. The ECB's current deposit facility rate is still set at -0.40%.

Back in autumn 2017, the EU institutions had agreed on harmonisation of the European Insolvency Directive which provides for the introduction of a new category for unsecured debt instruments for the ranking of such instruments in insolvency hierarchies (separated disclosure of "preferred" and "non-preferred" classes). This was implemented into German legislation in July 2018.

## COURSE OF BUSINESS

In the financial year 2018, pbb Group generated a pre-tax profit of €215 million, far surpassing the forecast issued at the start of 2018 of between €150 million and €170 million. It also exceeded the raised guidance of €175 million to €195 million issued on 4 July 2018, which was revised following a sound first half of 2018, helped by non-recurring income from the recovery of a so-called conditional additional purchase price adjustment (Besserungsanspruch) in connection with acceptance of a buyback offer for the debt instruments of Heta Asset Resolution AG (Heta). pbb eventually reached the upper end of the forecast revised again on 8 November 2018 to between €205 million and €215 million.

This positive development was primarily due to the excellent net interest income and lower-than-expected risk provisioning, which more than compensated for negative factors such as restructuring provisions recognised.

The higher than expected net interest income also had a positive impact on the operating income and consequently on the cost/income ratio, too. As a result, the 44.2% cost/income ratio developed much better than the forecast of a slight year-on-year increase. Since post-tax profit also exceeded expectations, the return on equity after taxes of 5.9% was also far above the forecasted range of 4% to 5%.

At a total of €10.5 billion, the volume of new business from Commercial Real Estate Finance and Public Investment Finance (including extensions by more than one year) was within the projected range of between €10.0 billion and €11.0 billion.

The financing volume of the REF and PIF segments amounted to an aggregate of €33.2 billion as at 31 December 2018, meeting the forecast which predicted a slight year-on-year increase (previous year: €31.9 billion).

Forecasts concerning pbb's risk-bearing capacity at the beginning of 2018 materialised during the course of the year. From a regulatory perspective, all regulatory minimum ratios were exceeded; available financial resources (after deducting the minimum levels required for regulatory purposes) also covered all further material risks. From an economic perspective, the capital available to cover the risks also exceeded economic capital requirements.

As at 31 December 2018, the CET1 ratio<sup>1</sup> amounted to 18.5% and, as expected, was significantly above the SREP ratio of 9.125% that banks have had to comply with since the beginning of 2018, in addition to the country-specific (and thus portfolio-specific) variable counter-cyclical capital buffer which, as at 31 December 2018, amounted to 0.19%.

<sup>1</sup> After confirmation of the 2018 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

## DEVELOPMENT IN EARNINGS

### Deutsche Pfandbriefbank Group (pbb Group)

2018 saw pbb Group lift its profit before tax to €215 million (2017: €204 million). The positive development is due in particular to pbb Group's key earnings position: its net interest income.

pbb Group has adhered to the international accounting standard IFRS 9 since 1 January 2018. Application of IFRS 9 led to changes in the Group's accounting policies. Comparative figures were not adjusted, in line with the transitional provisions of IFRS 9. More information on the changes the accounting policies and the effects of first-time application of IFRS 9 can be found in the Notes.

A detailed breakdown of the results is provided below:

pbb Group		2018 (IFRS 9)	2017 (IAS 39)	Change
<b>Operating performance</b>				
Operating income	in € million	471	453	18
Net interest income	in € million	450	407	43
Net fee and commission income	in € million	6	8	-2
Net income from financial instruments at fair value through profit or loss (Net income from fair value measurement) <sup>1)</sup>	in € million	-9	-5	-4
Net income from derecognition of financial instruments not measured at fair value through profit or loss (Net income from realisations) <sup>1)</sup>	in € million	32	45	-13
Thereof: from financial assets at amortised cost	in € million	31	43	-12
Net income from hedge accounting	in € million	-1	-1	-
Net other operating income	in € million	-7	-1	-6
Net income from allowances on financial assets (Net income from risk provisioning) <sup>1)</sup>	in € million	-14	-10	-4
General and administrative expenses	in € million	-193	-199	6
Expenses from bank levies and similar dues	in € million	-25	-28	3
Net income from write-downs and write-ups on non-financial assets	in € million	-15	-14	-1
Net income from restructuring	in € million	-9	2	-11
Profit or loss before tax	in € million	215	204	11
Income taxes	in € million	-36	-22	-14
Net income/loss	in € million	179	182	-3
<b>Key ratios</b>				
Earnings per share (basic and diluted)	in €	1.24	1.35	
Cost-income ratio	in %	44.2	47.0	
Return on equity before tax	in %	7.1	7.3	
Return on equity after tax	in %	5.9	6.5	

<sup>1)</sup> Solely the condensed and parenthesised line item descriptions are used subsequently.

The composition of the individual line items of the income statement is described in the note "Consistency".

**Net interest income** rose significantly to € 450 million (2017: € 407 million). This increase was due to positive changes on both the assets and equity and liabilities side of the balance sheet. On the assets side, the average Commercial Real Estate Finance volume grew from € 24.4 billion to € 25.8 billion. On the equity and liabilities side of the balance sheet, interest expenses decreased due to a smaller funding portfolio. Furthermore, liabilities falling due were replaced at lower rates. As in the same period of the previous year, pbb Group profited from floors in client business, given the negative interest rate environment.

**Net fee and commission income** from non-accruable fees amounted to € 6 million (2017: € 8 million).

**Net income from fair value measurement** (€ -9 million; 2017: € -5 million) includes changes to the fair value of free-standing derivatives (€ -1 million; 2017: € -5 million) and, unlike the previous year, non-derivative financial instruments that have to be measured at fair value (2018: € -8 million) due to the application of IFRS 9. In 2018, the figure was especially influenced by pull-to-par effects (whereby market value approaches zero towards maturity). The fair value of non-derivative financial instruments also fell, due among other things to a wider credit spread of a Southern European security. The expense was partially offset by income resulting from the measurement, and subsequent disposal, of the Heta conditional additional purchase price adjustment (Heta-Besserungsanspruch).

**Net income from realisations** of € 32 million were much lower year-on-year (2017: € 45 million). This decrease was due to declining income from early repayments of financial assets carried at amortised cost (€ 26 million; 2017: € 45 million), which was the result of lower early repayments. Net income from realisations in 2018 also profited from the sale of a PIF loan with a higher default risk.

**Net income from hedge accounting** includes ineffective portions within the permitted range. Since hardly any occurred, net income from hedge accounting remained almost unchanged at € -1 million as in the previous year (2017: € -1 million).

**Net other operating income** (€ -7 million; 2017: € -1 million) primarily included changes from net provisions recognised in the amount of € 4 million (2017: € 24 million), which was attributable among other things to legal expenses and risks, and to tax matters. Furthermore, currency translation expenses of € 2 million (2017: € 2 million) were incurred.

**Net income from risk provisioning** (€ -14 million; 2017: € -10 million) resulted mainly from net additions to stage 3 impairments in the amount of € 19 million. These additions were predominantly due to impairments on financings of shopping centres in the United Kingdom. These expenses were partly compensated by net reversals of stage 2 impairments in the amount of € 9 million, which were due to holdings in the portfolio set to mature and/or shortened maturities. Provisions for irrevocable loan commitments were also increased by € 5 million net.

**General and administrative expenses** of € 193 million were lower year-on-year (2017: € 199 million). Personnel expenses fell compared with the previous year, which was negatively impacted by additions to provisions. Non-personnel expenses were almost unchanged from the previous year's levels. Following completion of regulatory projects, the focus in 2018 increasingly shifted to strategic measures such as establishment of an electronic platform for brokering public-sector loans, or the expansion of US activities.

**Expenses from bank levies and similar dues** (€25 million; 2017: €28 million) mainly comprised expenses for the bank levy; taking into account pledged collateral, this amounted to 15% (€21 million; 2017: €20 million). Furthermore, this line item comprised expenses of €4 million (2017: €8 million) for the private Joint Fund for Securing Customer Deposits and the statutory deposit guarantee scheme. These expenses for the Joint Fund for Securing Customer Deposits and the deposit guarantee scheme were lower than in the previous year, due to the change in the basis for calculation and the fact that pledged collateral of 30% was included for the first time.

**Net income from write-downs and write-ups on non-financial assets** (€-15 million; 2017: €-14 million) resulted primarily from depreciation of tangible assets, and amortisation of intangible assets.

**Net income from restructuring** (€-9 million; 2017: €2 million) included additions to provisions relating to the reorganisation of the business activities in Public Investment Finance and the centralisation of infrastructure tasks. In the year before, net income from restructuring had benefited from the reversal of provisions and reached a positive figure.

**Income taxes** (expense of €36 million; 2017: expense of €22 million) firstly comprised the current tax expense of €35 million (2017: expense of €39 million). Despite the higher net income, the current tax expense was down on the previous year since provisions for specific imminent risks were re-estimated and reversed as a consequence. Secondly, there was a deferred tax expense of €1 million (2017: tax income of €17 million). In the previous year, positive reversal effects overall led to substantial tax income that did not materialise in the year under review.

## Operating Segments

Segment reporting is based on management reporting results. More information on this can be found in the note on "Notes to Segment Reporting by Operating Segment".

### Real Estate Finance (REF)

The REF business segment comprises financing for professional real estate investors. The volume of new business (including extensions by more than one year) totalled €9.5 billion (2017: €10.7 billion). As projected at the beginning of 2018, total comprehensive income was largely attributable to the REF segment.



<b>Real Estate Finance</b>		<b>2018 (IFRS 9)</b>	<b>2017 (IAS 39)<sup>1)</sup></b>	Change
<b>Operating performance</b>				
Operating income	in € million	391	368	23
Net interest income	in € million	372	334	38
Net fee and commission income	in € million	6	9	-3
Net income from fair value measurement	in € million	-8	-	-8
Net income from realisations	in € million	27	45	-18
Net income from hedge accounting	in € million	-1	-1	-
Net other operating income	in € million	-5	-19	14
Net income from risk provisioning	in € million	-22	-8	-14
General and administrative expenses	in € million	-154	-158	4
Expenses from bank levies and similar dues	in € million	-14	-15	1
Net income from write-downs and write-ups on non-financial assets	in € million	-12	-12	-
Net income from restructuring	in € million	-7	2	-9
Profit or loss before tax	in € million	182	177	5
<b>Key ratio</b>				
Cost-income ratio	in %	42.5	46.2	
<b>Balance-sheet-related measures</b>		<b>31.12.2018</b>	<b>31.12.2017</b>	
Financing volumes	in € billion	26.8	24.9	
Risk-weighted assets <sup>2)</sup>	in € billion	8.3	8.3	
Equity <sup>3)</sup>	in € billion	1.4	1.2	

<sup>1)</sup> Adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

<sup>2)</sup> Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.

<sup>3)</sup> Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI (IAS 39: AFS reserve) and additional equity instruments (AT1 capital). The amount as of 31.12.2017 was adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

Net interest income (€372 million; 2017: €334 million) benefited from an increase in the average volume of interest-bearing loans, rising to €25.8 billion (2017: €24.4 billion). Furthermore, interest expenses decreased due to a smaller funding portfolio and liabilities falling due which were replaced at lower rates. Net income from fair value measurement primarily included allocated matters. Net income from realisations (€27 million; 2017: €45 million) comprised early termination fees of €16 million (2017: €31 million), fee realisations totalling €11 million (2017: €14 million) and positive effects from the redemption of liabilities. Net other operating income (€-5 million; 2017: €-19 million) comprised net allocations to provisions for legal matters and currency translation expenses.

Net income from risk provisioning (€-22 million; 2017: €-8 million) resulted mainly from net additions to stage 3 impairments in the amount of €19 million, net additions to provisions for off-balance sheet credit business of €5 million and net reversals of stage 2 impairments in the amount of €2 million.

At €154 million, general and administrative expenses were below the previous year's figure (2017: €158 million), in line with the positive development at Group level.

Expenses from bank levies and similar dues (€14 million; 2017: €15 million) comprised in particular the allocated expenses for the bank levy, taking into account pledged collateral amounting to 15%.

Net income from write-downs and write-ups on non-financial assets (€–12 million; 2017: €–12 million) resulted primarily from depreciation of tangible assets, and amortisation of intangible assets.

### Public Investment Finance (PIF)

The PIF business segment comprises financing eligible for inclusion in Pfandbrief cover, extended primarily for the provision of public infrastructure. The volume of new business amounted to €1.0 billion during the period under review (2017: €1.0 billion). Profit before tax amounted to €8 million (2017: loss before tax of €12 million) and was above the forecast, which had projected a slight loss before tax; the result reflected the sound net interest income and the positive net income from risk provisioning.

Public Investment Finance		2018 (IFRS 9)	2017 (IAS 39) <sup>1)</sup>	Change
<b>Operating performance</b>				
Operating income	in € million	38	26	12
Net interest income	in € million	34	30	4
Net fee and commission income	in € million	1	–	1
Net income from fair value measurement	in € million	–2	–2	–
Net income from realisations	in € million	5	–	5
Net income from hedge accounting	in € million	–	–	–
Net other operating income	in € million	–	–2	2
Net income from risk provisioning	in € million	4	–6	10
General and administrative expenses	in € million	–27	–27	–
Expenses from bank levies and similar dues	in € million	–4	–4	–
Net income from write-downs and write-ups on non-financial assets	in € million	–2	–1	–1
Net income from restructuring	in € million	–1	–	–1
Profit or loss before tax	in € million	8	–12	20
<b>Key ratio</b>				
Cost-income ratio	in %	76.3	>100.0	
<b>Balance-sheet-related measures</b>				
		<b>31.12.2018</b>	<b>31.12.2017</b>	
Financing volumes	in € billion	6.4	7.0	
Risk-weighted assets <sup>2)</sup>	in € billion	1.4	1.6	
Equity <sup>3)</sup>	in € billion	0.1	0.2	

<sup>1)</sup> Adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

<sup>2)</sup> Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.

<sup>3)</sup> Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI (IAS 39: AfS reserve) and additional equity instruments (AT1 capital). The amount as of 31.12.2017 was adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

The increase in net interest income to €34 million (2017: €30 million) was due in particular to lower funding costs. The decline in the average financing volume, to €6.7 billion (2017: €7.4 billion) was partially offset by an increase in the average portfolio margin. Net income from fair value measurement was primarily due to allocated matters. Net income from realisations benefited from the sale of a loan with a higher default risk.

Net income from risk provisioning (€4 million; 2017: €–6 million) mainly resulted from net reversals of stage 2 impairments due to holdings in the portfolio set to mature and/or shortened maturities.

General and administrative expenses of €27 million were in line with the prior-year period (2017: €27 million).

### Value Portfolio (VP)

The Value Portfolio (VP) operating segment includes pbb Group's non-strategic portfolios and activities, and is continuously divested in line with pbb's strategy. Profit before tax amounted to €20 million (2017: €33 million) and was above the forecast, which had projected a slight loss before tax, due among other things to the Heta non-recurring effect.

Value Portfolio		2018 (IFRS 9)	2017 (IAS 39) <sup>1)</sup>	Change
<b>Operating performance</b>				
Operating income	in € million	37	53	-16
Net interest income	in € million	39	37	2
Net fee and commission income	in € million	-1	-1	-
Net income from fair value measurement	in € million	1	-3	4
Net income from realisations	in € million	-	-	-
Net income from hedge accounting	in € million	-	-	-
Net other operating income	in € million	-2	20	-22
Net income from risk provisioning	in € million	4	4	-
General and administrative expenses	in € million	-12	-14	2
Expenses from bank levies and similar dues	in € million	-7	-9	2
Net income from write-downs and write-ups on non-financial assets	in € million	-1	-1	-
Net income from restructuring	in € million	-1	-	-1
Profit or loss before tax	in € million	20	33	-13
<b>Key ratio</b>				
Cost-income ratio	in %	35.1	28.3	
<b>Balance-sheet-related measures</b>				
		<b>31.12.2018</b>	<b>31.12.2017</b>	
Financing volumes	in € billion	13.2	13.8	
Risk-weighted assets <sup>2)</sup>	in € billion	4.0	3.5	
Equity <sup>3)</sup>	in € billion	1.1	1.1	

<sup>1)</sup> Adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

<sup>2)</sup> Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.

<sup>3)</sup> Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI (IAS 39: AfS reserve) and additional equity instruments (AT1 capital). The amount as of 31.12.2017 was adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

Lower funding expenses pushed net interest income up to €39 million (2017: €37 million), even though the financing volume declined as planned. Net income from fair value measurement benefited from the Heta conditional additional purchase price adjustment (Heta-Besserungsanspruch).

Net income from risk provisioning (€4 million; 2017: €4 million) mainly resulted from net reversals of stage 2 impairments due to holdings in the portfolio set to mature and/or shortened maturities.

General and administrative expenses of €12 million were lower year-on-year (2017: €14 million) in line with the development at Group level.

### Consolidation & Adjustments (C&A)

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

Consolidation & Adjustments		2018 (IFRS 9)	2017 (IAS 39) <sup>1)</sup>	Change
<b>Operating performance</b>				
Operating income	in € million	5	6	-1
Net interest income	in € million	5	6	-1
Net fee and commission income	in € million	-	-	-
Net income from fair value measurement	in € million	-	-	-
Net income from realisations	in € million	-	-	-
Net income from hedge accounting	in € million	-	-	-
Net other operating income	in € million	-	-	-
Net income from risk provisioning	in € million	-	-	-
General and administrative expenses	in € million	-	-	-
Expenses from bank levies and similar dues	in € million	-	-	-
Net income from write-downs and write-ups on non-financial assets	in € million	-	-	-
Net income from restructuring	in € million	-	-	-
Profit or loss before tax	in € million	5	6	-1
<b>Balance-sheet-related measures</b>		<b>31.12.2018</b>	<b>31.12.2017</b>	
Risk-weighted assets <sup>2)</sup>	in € billion	0.9	1.1	
Equity <sup>3)</sup>	in € billion	0.3	0.4	

<sup>1)</sup> Adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

<sup>2)</sup> Including weighted credit risk positions and capital charges for market risk positions and operational risk, using a scaling factor of 12.5.

<sup>3)</sup> Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI (IAS 39: AfS reserve) and additional equity instruments (AT1 capital).

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

## DEVELOPMENT IN ASSETS

### Assets

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Cash reserve	1,388	999	999
Financial assets at fair value through profit or loss	1,659	1,735	870
Positive fair values of stand-alone derivatives	749	870	870
Debt securities	258	333	–
Loans and advances to customers	649	529	–
Shares in investment funds qualified as debt instruments	3	3	–
Financial assets at fair value through other comprehensive income	1,984	2,182	2,385
Debt securities	1,564	1,735	2,382
Loans and advances to other banks	16	17	–
Loans and advances to customers	404	430	–
Shares in investment funds qualified as debt instruments	–	–	3
Financial assets at amortised cost after credit loss allowances	50,341	50,323	50,858
Financial assets at amortised cost before credit loss allowances	50,453	50,427	50,942
Debt securities	8,039	8,667	8,253
Loans and advances to other banks	2,231	2,400	2,415
Loans and advances to customers	40,183	39,360	40,274
Credit loss allowances on financial assets at amortised cost	–112	–104	–84
Positive fair values of hedge accounting derivatives	2,207	2,678	2,678
Valuation adjustment from portfolio hedge accounting	2	–1	–1
Tangible assets	4	6	6
Intangible assets	37	36	36
Other assets	35	34	34
Current income tax assets	26	42	42
Deferred income tax assets	86	71	87
<b>Total assets</b>	<b>57,769</b>	<b>58,105</b>	<b>57,994</b>

### General Development in Assets

The composition of the individual asset line items is described in the note on “Consistency”.

Total assets declined slightly compared to 1 January 2018 (including application of IFRS 9). The cash reserve increased during the reporting period, due to repayments of municipal loans and securities. The portfolio of financial assets carried at fair value through profit or loss was almost unchanged overall in comparison with the previous year, since the reduction of the portfolio of financial assets that have to be carried at fair value through profit or loss (due to the characteristics of their contractual cash flows) and the decrease in derivative fair values were largely compensated for by the increase in the syndication business.

The financial assets at fair value through other comprehensive income reduced slightly, primarily owing to maturities. The carrying amount of the financial assets at amortised cost did not change significantly since the increase in Commercial Real Estate Finance and the Value Portfolio decrease in line with the strategy largely offset each other. The fair value of the hedging derivatives fell in line with the adjusted interest rate level.

## Investments

Given the business model, investments in tangible assets and intangible assets are of minor significance for pbb Group. Additions to intangible assets amounted to €13 million during the year under review (2017: €20 million). Services rendered by third parties were used for internally developed software. These investments covered all segments of pbb Group.

## DEVELOPMENT IN FINANCIAL POSITION

### Liabilities and equity

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Financial liabilities at fair value through profit or loss	881	1,040	956
Negative fair values of stand-alone derivatives	881	1,040	956
Financial liabilities measured at amortised cost	50,714	50,919	50,919
Liabilities to other banks	3,867	3,797	3,797
Liabilities to customers	24,901	26,244	26,244
Bearer bonds	21,237	19,876	19,876
Subordinated liabilities	709	1,002	1,002
Negative fair values of hedge accounting derivatives	2,538	2,805	2,889
Valuation adjustment from portfolio hedge accounting	23	–	–
Provisions	268	247	245
Other liabilities	40	70	70
Current income tax liabilities	48	57	57
<b>Liabilities</b>	<b>54,512</b>	<b>55,138</b>	<b>55,136</b>
Equity attributable to the shareholders of pbb	2,959	2,967	2,858
Subscribed capital	380	380	380
Additional paid-in capital	1,637	1,637	1,637
Retained earnings	760	722	731
Consolidated profit	179	182	182
Accumulated other comprehensive income (OCI)	3	46	–72
from pension commitments	–73	–75	–75
from cash flow hedge accounting	–	22	22
from financial assets at fair value through OCI (IAS 39: AfS reserve)	76	99	–19
Additional equity instruments (AT1 capital)	298	–	–
<b>Equity</b>	<b>3,257</b>	<b>2,967</b>	<b>2,858</b>
<b>Total liabilities and equity</b>	<b>57,769</b>	<b>58,105</b>	<b>57,994</b>

### Liabilities

The composition of the individual equity and liability line items is described in the note on “Consistency”.

Liabilities decreased, especially due to lower liabilities to customers and negative fair values of derivatives. Liabilities to customers declined, reflecting a lower level of promissory note loans and registered bonds. In line with assets, the negative fair values of derivatives were lower due to market-induced effects. The volume of bearer bonds increased, given the Pfandbrief issuance during the period under review.

## Equity

The changes in equity are presented in the "Equity" note.

The Management Board and Supervisory Board will propose to the Annual General Meeting on 7 June 2019 to distribute a dividend of €1.00 per share entitled to dividends.

## Key Regulatory Capital Ratios (fully phased-in)<sup>1</sup>

At the balance sheet date, the CET1 ratio amounted to 18.5% (31 December 2017: 17.6%), the own funds ratio to 24.9% (31 December 2017: 22.2%) and the leverage ratio to 5.3% (31 December 2017: 4.5%). Please refer to the Risk and Opportunity Report ("Internal Capital Adequacy Assessment Process (ICAAP)" section) for further information on the key regulatory capital ratios.

## Liquidity

### Principles and Objectives of Liquidity and Financial Management

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

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

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

### Liquidity Ratio

Since 1 January 2018, a minimum liquidity coverage ratio (LCR) of 100% has been mandatory in regulatory liquidity reporting. In 2018 and 2017 the figures determined for pbb Group were significantly higher than 100%. As at 31 December 2018, the Liquidity Coverage Ratio was 212% (31 December 2017: 187%).

### Funding

During the financial year 2018, pbb Group raised new long-term funding in the amount of €5.5 billion (2017: €6.6 billion). Repurchases and terminations totalled €0.3 billion (2017: €1.0 billion). The funding volume comprised unsecured issues as well as Pfandbrief issues, both in the form of benchmark issues and private placements. At €3.6 billion (2017: €3.8 billion), Pfandbriefe accounted for two thirds of the total volume, with unsecured funding accounting for €1.6 billion (2017: €2.3 billion). In addition, one subordinated Additional Tier 1 issue was placed in an amount of €0.3 billion (2017: €0.0 billion). Subordinated Tier 2 emissions were not issued (2017: €0.5 billion). Most transactions were denominated in euro, and were placed as fixed-rate bonds. Unhedged interest rate exposures were usually hedged by swapping fixed against floating interest rates. To minimise foreign currency risk between assets and liabilities, Pfandbriefe were also issued in GBP (equivalent of €0.4 billion), USD (equivalent of €0.5 billion) and SEK (equivalent of €0.2 billion).

<sup>1</sup> After confirmation of the 2018 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

## Ratings

The following table shows the senior unsecured ratings and Pfandbriefe ratings, mandated by pbb, as at the reporting date:

### Senior unsecured ratings and ratings for Pfandbriefe of Deutsche Pfandbriefbank AG (pbb)<sup>1)</sup>

	31.12.2018			31.12.2017		
	Standard & Poor's	DBRS <sup>2)</sup>	Moody's	Standard & Poor's	DBRS <sup>2)</sup>	Moody's
Long-term issuer rating/outlook	A-/negative	BBB/positive	–	A-/negative	BBB/stable	–
Short-term issuer rating	A-2	R-2 (high)	–	A-2	R-2 (high)	–
Long-term "preferred" senior unsecured debt rating <sup>3)</sup>	A-	BBB	–	A-	BBB <sup>5)</sup>	–
Long-term "non-preferred" senior unsecured debt rating <sup>4)</sup>	BBB-	BBB (low)	–	BBB-	BBB <sup>5)</sup>	–
Public Sector Pfandbriefe	–	–	Aa1	–	–	Aa1
Mortgage Pfandbriefe	–	–	Aa1	–	–	Aa1

<sup>1)</sup>This overview does not include all ratings/outlooks.

<sup>2)</sup>The rating mandate with DBRS was terminated as at 31 December 2018.

<sup>3)</sup>S&P: "Senior Unsecured Debt"; DBRS: "Senior Unsecured Debt".

<sup>4)</sup>S&P: "Senior Subordinated Debt"; DBRS: "Senior Unsecured Debt".

<sup>5)</sup>As at 31 December 2017, DBRS did not differentiate between "Senior Preferred" and "Senior Non-Preferred" liabilities issued by pbb.

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

Most recently, pbb's unsecured ratings were mainly influenced by legislative changes and, in this context, changes to rating methodologies. Rating actions took place in particular due to the more detailed specifications with regard to the implementation of the EU Bank Recovery and Resolution Directive (BRRD). Whilst S&P and Moody's had already implemented respective changes to their rating methodologies, DBRS followed suit in 2018. Thus, in 2018 rating changes occurred only at DBRS, among other things, in this context:

On 25 June 2018, DBRS confirmed the Bank's ratings and raised the rating outlook from "stable" to "positive" against the background of the Bank's risk profile and capitalisation. On 4 July 2018, DBRS placed the long-term senior unsecured ratings of six German banks, including pbb, under review for downgrade amid the legislative changes in connection with section 46f of the German Banking Act (Kreditwesengesetz – "KWG"). DBRS terminated the review for downgrade on 27 July 2018 and lowered pbb's long-term "non-preferred" senior unsecured debt rating to "BBB (low)", whilst affirming the rating of "preferred" senior instruments – which, at DBRS, corresponds to the new "senior debt rating" at "BBB". The rating outlook remained positive for both ratings. The Bank terminated DBRS's rating mandate on 31 December 2018.



The reduction of the federal government's indirect partial ownership of pbb (from 20% to 3.5%) in May 2018 had no impact on the ratings.

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

### Off-balance sheet commitments

Irrevocable loan commitments of €4,731 million as at the balance sheet date (31 December 2017: €4,667 million) represent the majority of off-balance sheet commitments. Contingent liabilities on guarantees and warranties amounted to €76 million as at 31 December 2018 (31 December 2017: €120 million). In addition, cash collateral relating to irrevocable payment obligations to the German Federal Agency for Financial Market Stabilisation (Finanzmarktstabilisierungsanstalt – "FMSA") resulting from the bank levy, and to the deposit guarantee scheme of German banks totalling €20 million (31 December 2017: €15 million) was pledged.

## MATERIAL RELATED PARTY TRANSACTIONS

No material transactions with related parties were entered into during the financial years 2018 and 2017. Please refer to the note on "Relationships with Related Parties" for more details.

## SUMMARY

Due to the good net interest income and lower-than-expected loan loss provisions, pbb Group generated profit before tax of €215 million in the financial year 2018, well above the range of €150 million to €170 million projected at the beginning of 2018.

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

Regulatory requirements regarding equity and liquidity were complied with at all times. pbb Group is well-positioned for potential future regulatory changes.

# Risk and Opportunity Report

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

## ORGANISATION AND PRINCIPLES OF RISK AND CAPITAL MANAGEMENT

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

### Organisation and Committees

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

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

The following are major components of the risk management system in the responsibility of the Management Board:

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

The Management Board notifies the Supervisory Board with regard to significant changes in the business and risk strategies as well as the risk profile of pbb Group. The Risk Management and Liquidity Strategy Committee (RLA) of the Supervisory Board is mainly responsible for controlling the overall risk situation and for monitoring, establishing and improving an efficient risk management system, and is also responsible for the liquidity management and assurance of pbb Group and resolves upon necessary credit approvals for credit decisions. The Management Board notifies this committee of all increases to specific allowances and the creation of new specific allowances in excess of €5 million and also notifies this committee at regular intervals of major exposures with higher levels of risk.

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

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

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

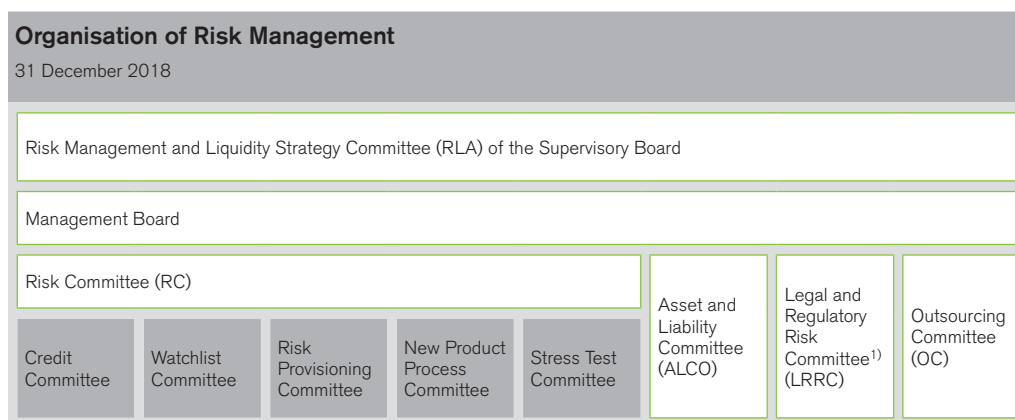
The **Watchlist Committee** is chaired by the CCOs (with delegation opportunities to a Senior Credit Executive) and meets every month. All exposures identified by the early warning system are discussed and, if appropriate, individual measures are decided there; these measures have to be subsequently implemented by the relevant departments. Where necessary, the committee takes decisions regarding the need to transfer exposures to CRM REF Workout, which then takes the necessary steps for restructuring or workout on the basis of an individual exposure strategy. All necessary credit decisions are taken by the key personnel in line with the allocation of credit powers or in the Credit Committee.

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

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

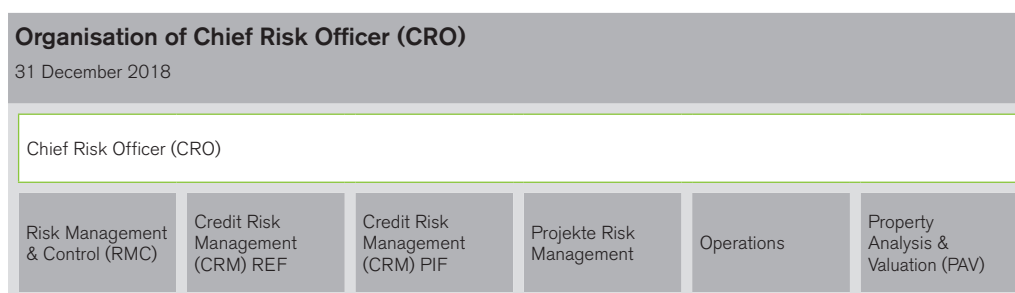
The **Stress Test Committee** is responsible for the methodology, performance and monitoring of the internal stress tests. It is chaired by the CRO. The Committee also contributes to the preparation of scenarios for the Recovery Plan which every bank is required by law to prepare.

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



<sup>1)</sup> Reporting via Compliance.

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



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

- > The unit **Risk Management & Control**, which is amongst others responsible for monitoring market, credit, operational and liquidity risks as well as the risk-bearing capacity of pbb Group and which is also responsible for Group-wide uniform risk measuring methods and risk reports. The Head of RMC has changed in the reporting period.
- > The units of the **Chief Credit Officers REF/PIF** and **“Projekte Risk Management”** of pbb Group, which are each responsible for the analysis of new business and portfolio management. In addition, CRM REF also comprises the Workout (Real Estate) unit, which is responsible for the recovery and workout of all critical exposures in the Real Estate Finance segment, and the central unit Credit Processes, which is responsible in particular for the organisation of the Credit Committee and implementation of regulatory requirements in the credit processes.

- > The unit **Operations**, which is responsible for the global servicing and administration of the loan portfolio (including technical implementation of loan agreements), settlement of capital markets transactions, administration and processing of the Group's securities and derivatives portfolios, as well for handling domestic and international payments.
- > The unit **Property Analysis & Valuation**, which is responsible for the analysis and uniform valuation of properties serving as collateral, using market valuation and loan-to-value methods, as well as for the monitoring of financed developments.

In addition to the CRO function, the Compliance entity and the Group Internal Audit entity (independent) complement the risk management system of pbb Group. Compliance has established checking and reporting processes with regard to money laundering, sanctions, embargos and other criminal acts, as well as for other Compliance topics. Moreover, Compliance is responsible for the central coordination of key controls within the framework of the Internal Control System. Compliance is also represented in various committees. The area of responsibility of Group Internal Audit comprises risk-oriented regular as well as event-driven audits of processes, controls and systems. This also includes the revision of the risk management system. Regarding legal issues Risk Management is also supported by the Legal department.

### Risk Strategy and -Policies

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

At the beginning of 2018 the risk strategy was revised during the course of the annual strategy development process 2018. Each update was adopted by the management board and approved by the supervisory board respectively. Essentially, this change involved adjustments to the ICAAP management approach, related to the normative and economic perspectives.

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

### Risk Reporting

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

## Risk Quantification and Risk Management

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

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

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

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

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

## RISK TYPES

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

- > Credit risk (counterparty risk)
- > Market risk
- > Liquidity and Funding risk
- > Operational risk (including legal risk)
- > Business and strategic risk
- > Property risk
- > Pension risk

### Credit Risk (Counterparty Risk)

#### Definitions

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

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

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

### Credit Risk Strategy and Principles

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

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

### Credit Risk Reports

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

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

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

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

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

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

In addition to the stress tests for economic capital, there are also RWA reverse stress tests. They investigate the extent to which a certain risk parameter (e.g. rating, loss given default (LGD), currency) can change before a minimum common equity tier 1 ratio (CET1) is no longer met. The minimum level for the common equity tier 1 (CET1) ratio is derived from the bank's individual SREP CET1 ratio. Tolerance change levels have been defined for all tested risk parameters; these levels must not be violated if the test of pbb Group is to be successfully completed.

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

### **Credit Risk Management and Monitoring**

**Credit Risk Management** At the portfolio level, the intended portfolio structure is defined in the risk strategy by means of structure components. The limits are also based on the available financial resources, and include for pbb Group for example:

- > Limiting of country risks
- > Definition of strategic risk parameters (e.g. regions, financing duration)

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

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



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

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

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

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

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

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

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

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

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

#### **Hedging and Minimising Risk by Collateral**

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

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

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

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

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

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

## Credit Portfolio

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

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

With the introduction of IFRS 9, the new rules governing the classification and measurement of financial assets have led to changes in some of the carrying amounts – and hence, changes in EaD amounts. The amount of the impairments have also changed due to the new standard. Other than that, IFRS 9 had no impact on the control of credit risk.

The Group's credit portfolio had an aggregated EaD of €58.1 billion (31 December 2017: €57.5 billion).

**Overview of the Total Exposure of pbb Group: €58.1 billion EaD** The credit portfolio is broken down into three segments

- > Real Estate Finance (REF)
- > Public Investment Finance (PIF) as well as
- > the non-strategic segment Value Portfolio (VP) which is earmarked for being wound down.

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

EaD in the C&A segment was almost fully attributable (>99%; 31 December 2017: >99%) to EL classes 1 to 8; according to the internal classification, these are considered investment grade.

### Total portfolio: EaD according to operating segments

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Real Estate Finance	29.9	28.3	1.6	5.7
Public Investment Finance	7.6	7.9	-0.3	-3.8
Value Portfolio	16.3	17.0	-0.7	-4.1
Consolidation & Adjustments	4.3	4.3	-	-
<b>Total</b>	<b>58.1</b>	<b>57.5</b>	<b>0.6</b>	<b>1.0</b>

As of 31 December 2018, the total exposure (EaD) of the pbb Group rose by €0.6 billion to €58.1 billion, compared to year-end 2017. On the whole, the percentage share of EaD in the strategic segment REF increased again (52%; 31 December 2017: 49%), fell slightly in PIF (13%; 31 December 2017: 14%), whereas it decreased furthermore in the non-strategic VP (28%; 31 December 2017: 29%). The percentage share of the EaD in C&A remained unchanged at 7% compared to year-end 2017. Explanations concerning changes in individual segments are provided with the detailed presentation of the respective segment.

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

EL for pbb Group totalled €86 million as at 31 December 2018 (31 December 2017: €106 million). The EL decline was predominantly due to repayments in the business segments REF, PIF and VP as well as LGD changes in the REF segment.

#### Total exposure: expected loss according to operating segments

in € million	31.12.2018	31.12.2017	Change	
			in € million	in %
Real Estate Finance	56	65	-9	-13.8
Public Investment Finance	2	9	-7	-77.8
Value Portfolio	28	32	-4	-12.5
Consolidation & Adjustments	-	-	-	-
<b>Total</b>	<b>86</b>	<b>106</b>	<b>-20</b>	<b>-18.9</b>

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

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

**Regional Breakdown of the Portfolio** At the reporting date, the main focus of the exposure of the pbb Group was unchanged on Western Europe. Germany continued to account for most of the overall exposure, with 39% (€22.7 billion). The year-on-year EaD reduction in Germany (down €0.4 billion) was mainly attributable to repayments in the segments PIF and VP, which exceeded new business originated in the REF portfolio. The €1.1 billion EaD increase in France resulted – almost in equal proportions – from new business generated in the REF and PIF segments, and money market transactions with French credit institutions recognised under C&A. The decrease in the REF portfolio in the United Kingdom (€0.5 billion) and Sweden (€0.3 billion) was almost exclusively attributable to repayments. The lower exposure to Spain resulted mainly from maturing bonds and sales in the PIF segment, which more than compensated the €0.2 billion rise in the REF segment.

The significant exposure increase in the USA of €1.0 billion was attributable to new business in the strategic segment REF.

The category "Other", which accounted for €1.5 billion (or around 2.6% of the portfolio), largely comprises bonds issued by supranational organisations. The largest items of the category "Other Europe" were the Netherlands with €0.8 billion, Belgium with €0.4 billion as well as Switzerland and Slovenia with €0.3 billion each (31 December 2017: the Netherlands €0.6 billion, Belgium €0.3 billion, Switzerland €0.4 billion, Slovenia €0.3 billion).

#### Total portfolio: EaD according to regions

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Germany	22.7	23.1	-0.4	-1.7
France	8.7	7.6	1.1	14.5
Austria	6.3	6.4	-0.1	-1.6
United Kingdom	4.8	5.3	-0.5	-9.4
Spain	2.8	3.1	-0.3	-9.7
Other Europe <sup>1)</sup>	2.4	2.0	0.4	20.0
Italy	2.1	2.1	-	-
USA	1.9	0.9	1.0	> 100.0
Poland	1.6	1.7	-0.1	-5.9
Other <sup>2)</sup>	1.5	1.6	-0.1	-6.3
Sweden	1.3	1.6	-0.3	-18.8
Portugal	0.9	0.9	-	-
Finland	0.5	0.4	0.1	25.0
Czech Republic	0.4	0.4	-	-
Hungary	0.2	0.3	-0.1	-33.3
<b>Total</b>	<b>58.1</b>	<b>57.5</b>	<b>0.6</b>	<b>1.0</b>

<sup>1)</sup> As of 31 December 2018 the category "Other Europe" comprises the Netherlands, Belgium, Switzerland, Slovenia, Slovakia, Romania, Denmark, Luxembourg, Ireland, Norway and Latvia.

<sup>2)</sup> As of 31 December 2018 the category "Other" comprises amongst others Supranationals, Japan and Canada.

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

#### Real Estate Finance: €29.9 billion EaD

The REF segment comprises real estate loans and related customer derivatives. EaD of the REF portfolio rose by a total of €1.6 billion to €29.9 billion, compared to 31 December 2017. Customer derivatives in the portfolio accounted for EaD of €0.1 billion as at 31 December 2018 and therefore reduced by €0.1 billion compared to year-end 2017.

The increase in exposure in the REF segment was primarily due to new business generated in the USA, Germany and France, while EaD decreases were recorded particularly in the United Kingdom and Sweden.

### Real Estate Finance: EaD according to regions

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Germany	14.2	13.9	0.3	2.2
United Kingdom	4.3	4.7	-0.4	-8.5
France	3.7	3.4	0.3	8.8
USA	1.9	0.9	1.0	> 100.0
Other Europe <sup>1)</sup>	1.5	1.1	0.4	36.4
Poland	1.3	1.4	-0.1	-7.1
Sweden	1.2	1.6	-0.4	-25.0
Austria	0.5	0.5	-	-
Czech Republic	0.4	0.4	-	-
Finland	0.4	0.2	0.2	100.0
Spain	0.4	0.2	0.2	100.0
Hungary	0.1	0.2	-0.1	-50.0
Italy	0.1	-	0.1	> 100.0
<b>Total</b>	<b>29.9</b>	<b>28.3</b>	<b>1.6</b>	<b>5.7</b>

<sup>1)</sup> As of 31 December 2018 the category "Other Europe" comprises the Netherlands, Switzerland, Belgium, Romania, Slovenia, Slovakia, Luxembourg, Denmark, and Norway.

The main items in the REF portfolio were the property types office buildings, with an EaD of €13.0 billion or 43% (31 December 2017: €10.4 billion, or 37%), retail properties (EaD of €5.9 billion, or 20% of the REF portfolio – 31 December 2017: €6.7 billion, or 24%) and residential properties with an EaD of €5.0 billion or 17% (31 December 2017: €4.6 billion, or 16%).

### Real Estate Finance: EaD according to property type

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Office buildings	13.0	10.4	2.6	25.0
Retail	5.9	6.7	-0.8	-11.9
Housing construction	5.0	4.6	0.4	8.7
Logistics/storage	3.0	3.1	-0.1	-3.2
Hotel/leisure	1.5	1.5	-	-
Other	0.9	1.2	-0.3	-25.0
Mixed Use	0.6	0.8	-0.2	-25.0
<b>Total</b>	<b>29.9</b>	<b>28.3</b>	<b>1.6</b>	<b>5.7</b>

At 31 December 2018, investment financings continued to dominate the portfolio (82%; 31 December 2017: 81%); development financings accounted for 16% of EaD (31 December 2017: 17%). There was still strong demand throughout 2018 for both commercial real estate investment and development financings. In line with its conservative risk strategy, the pbb Group provided development financings exclusively to professional partners, and subject to commensurate covenants regarding equity, pre-sales and pre-letting. Investment financings are defined as real estate loans, the debt servicing ability of which largely depends upon current cash flows from the property.

### Real Estate Finance: EaD according to loan type

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Investment financing	24.6	23.0	1.6	7.0
Development financing	4.9	4.9	–	–
Customer derivatives	0.1	0.2	–0.1	–50.0
Other	0.3	0.2	0.1	50.0
<b>Total</b>	<b>29.9</b>	<b>28.3</b>	<b>1.6</b>	<b>5.7</b>

### Public Investment Finance: € 7.6 billion EaD

The portfolio comprises the following financing:

- (I) Financing concluded directly with a public sector debtor, eligible according to the Pfandbrief Act, on the basis of a specific earmarking according to a defined product catalogue;
- (II) Financing of companies, which have a public sector or private legal structure and funding, which are to a great extent collateralised with a public sector guarantee within the meaning of the German Pfandbrief Act (transport and utility companies, municipal utilities, special-purpose associations, management companies, non-profits, associations); and
- (III) Financing of special-purpose vehicles, which are almost entirely collateralised with a public sector guarantee within the meaning of the German Pfandbrief Act. This also includes export financings covered by insurance policies or guarantees issued by the Federal Government or by other export credit agencies permitted for inclusion in Pfandbrief cover.

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

The decrease in EaD in the PIF segment of €0.3 billion, compared to the previous year-end, was due in particular to maturing loans and bonds as well as repayments in Germany and Spain, which more than compensated for new business generated in France.

### Public Investment Finance: EaD according to regions

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
France	3.9	3.5	0.4	11.4
Germany	1.7	1.9	–0.2	–10.5
Spain	1.0	1.5	–0.5	–33.3
Other Europe <sup>1)</sup>	0.3	0.3	–	–
Austria	0.3	0.3	–	–
United Kingdom	0.2	0.2	–	–
Finland	0.1	0.1	–	–
Other <sup>2)</sup>	0.1	0.1	–	–
Sweden <sup>3)</sup>	–	–	–	–
<b>Total</b>	<b>7.6</b>	<b>7.9</b>	<b>–0.3</b>	<b>–3.8</b>

<sup>1)</sup> As of 31 December 2018 the category "Other Europe" comprises Belgium, the Netherlands and Switzerland.

<sup>2)</sup> As of 31 December 2018 the category "Other" comprises amongst others Canada and Supranationals.

<sup>3)</sup> Sweden (31 December 2018): € 43 million.

"Public Sector Borrowers" summarises claims against sovereign states (27%), public-sector enterprises (20%), and regional governments and municipalities (53%). The definition also includes exposures guaranteed by these counterparties.

#### Public Investment Finance: EaD according to counterparty structure

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Public sector borrowers	7.5	7.7	-0.2	-2.6
Companies/special-purpose entities <sup>1)</sup>	0.1	0.2	-0.1	-50.0
Financial institutions <sup>2)</sup>	-	-	-	-
<b>Total</b>	<b>7.6</b>	<b>7.9</b>	<b>-0.3</b>	<b>-3.8</b>

<sup>1)</sup> Largely collateralised by guarantees and surety bonds.

<sup>2)</sup> Financial institutions with a state background or state guarantee.

99% of EaD (31 December 2017: 97%) was assigned to EL classes 1–8; according to the internal classification, these are considered investment-grade. 1% (31 December 2017: 3%) was in the non-investment grade category (EL classes 9 to 18). The shift reflected the repayment of a maturing non-investment grade bond in the first half of 2018.

#### Public Investment Finance: EaD according to Expected-Loss-Classes

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
EL-Class 1–5	7.5	7.5	-	-
EL-Class 6–8	0.1	0.2	-0.1	-50.0
EL-Class 9–18	-	0.2	-0.2	-100.0
<b>Total</b>	<b>7.6</b>	<b>7.9</b>	<b>-0.3</b>	<b>-3.8</b>

#### Value Portfolio: € 16.3 billion EaD

The Value Portfolio comprises non-strategic portfolios of the pbb Group.

In line with the strategy, the further decrease in the exposure as of 31 December 2018 compared with 31 December 2017 was mainly due to repayments in exposures to Germany. In the category Other exposure to Supranationals decreased slightly. Germany and Austria continued to account for the lion's share of the portfolio.



### Value Portfolio: EaD according to regions

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Austria	5.6	5.6	–	–
Germany	4.4	4.8	–0.4	–8.3
Italy	2.0	2.0	–	–
Spain	1.2	1.2	–	–
Other <sup>1)</sup>	1.0	1.1	–0.1	–9.1
Portugal	0.9	0.9	–	–
France	0.7	0.7	–	–
Poland	0.2	0.2	–	–
Other Europe <sup>2)</sup>	0.2	0.2	–	–
Hungary	0.1	0.1	–	–
Czech Republic <sup>3)</sup>	–	–	–	–
Finland <sup>3)</sup>	–	–	–	–
<b>Total</b>	<b>16.3</b>	<b>17.0</b>	<b>–0.7</b>	<b>–4.1</b>

<sup>1)</sup> As of 31 December 2018 the category "Other" comprises Supranationals and Japan.

<sup>2)</sup> As of 31 December 2018 the category "Other Europe" comprises Slovenia and Denmark.

<sup>3)</sup> Czech Republic (31 December 2018): €11 million; Finland (31 December 2018): 9 million.

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

### Value Portfolio: EaD according to counterparty structure

in € billion	31.12.2018	31.12.2017	Change	
			in € billion	in %
Public sector borrowers	14.8	15.4	–0.6	–3.9
Financial institutions <sup>1)</sup>	1.5	1.5	–	–
Companies	–	–	–	–
<b>Total</b>	<b>16.3</b>	<b>17.0</b>	<b>–0.7</b>	<b>–4.1</b>

<sup>1)</sup> Mainly Spanish covered bonds.

### Structured Products

pbb Group's residual holdings of Collateralised Debt Obligations guaranteed by one regional government had a notional value of €0.5 billion as at 31 December 2018 (31 December 2017: €0.5 billion) and a current fair value of €0.5 billion (31 December 2017: €0.5 billion).

The valuation of assets was based on available market prices.

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

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

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

in € billion	Stage 1	Stage 2	Stage 3	FVPL	Total
Class 1	0.7	–	–	–	0.7
Class 2	14.3	–	–	0.4	14.7
Class 3	0.3	–	–	–	0.3
Class 4	–	–	–	–	–
Class 5	0.3	–	–	–	0.3
Class 6	–	–	–	–	–
Class 7	1.6	–	–	–	1.6
Class 8	2.2	–	–	–	2.2
Class 9	6.4	–	–	0.1	6.5
Class 10	3.7	–	–	–	3.7
Class 11	5.8	0.7	–	–	6.5
Class 12	6.1	0.1	–	0.2	6.4
Class 13	2.7	0.5	–	–	3.2
Class 14	1.6	–	–	–	1.6
Class 15	1.4	0.1	–	–	1.5
Class 16	1.3	0.1	–	0.1	1.5
Class 17	0.4	–	–	–	0.4
Class 18	0.5	–	–	–	0.5
Class 19	0.2	0.2	–	–	0.4
Class 20	0.1	0.1	–	–	0.2
Class 21	0.1	0.2	–	–	0.3
Class 22	0.1	0.1	–	–	0.2
Class 23–24	–	–	–	–	–
Class 25	–	0.1	–	–	0.1
Class 26	–	–	–	–	–
Class 27	–	0.2	–	–	0.2
Defaulted	–	–	0.3	–	0.3
<b>Total</b>	<b>49.7</b>	<b>2.4</b>	<b>0.3</b>	<b>0.9</b>	<b>53.3</b>

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

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

### Watchlist and Non-performing Loans

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

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

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

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

## Development of Watchlist and non-performing loans of pbb Group

EaD in € million	31.12.2018				31.12.2017				Change	
	REF	PIF	VP	Total <sup>1)</sup>	REF	PIF	VP	Total <sup>1)</sup>	in € million	in %
Workout loans	16	–	–	16	15	–	–	15	1	6.7
Restructuring loans	332	–	–	332	233	–	–	233	99	42.5
<b>Non-performing loans</b>	<b>348</b>	<b>–</b>	<b>–</b>	<b>348</b>	<b>248</b>	<b>–</b>	<b>–</b>	<b>248</b>	<b>100</b>	<b>40.3</b>
<b>Watchlist loans</b>	<b>1</b>	<b>38</b>	<b>167</b>	<b>206</b>	<b>24</b>	<b>112</b>	<b>224</b>	<b>360</b>	<b>-154</b>	<b>-42.8</b>

<sup>1)</sup> No exposure in C&A.

Watchlist and non-performing loans declined by a total of €54 million during the period from 31 December 2017 to 31 December 2018.

The volume of watchlist loans was reduced by €154 million net: additions in the amount of €8 million were offset by €162 million in exposure reduction. €145 million of this amount primarily resulted from repayments of three exposures, €17 million resulted from changes in the amounts of existing exposures.

Non-performing loans increased by €100 million net during the year under review. In the REF segment, two UK exposures in the amount of €156 million were classified as workout loans. These were offset by €56 million in successful workouts or restructurings and exposure reductions.

### Credit loss allowances and Provisions

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

### Opportunities

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

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

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

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

Besides positive developments in default rates or loss ratios, opportunities may arise in connection with counterparty credit risk – theoretically, and regardless of other corporate objectives – in the event of declining portfolio exposure. For instance, this may occur if borrowers redeem or repay their loans faster than anticipated, given contractual agreements or historical data. Exposure values in the derivatives portfolio may decline where the market values of positions associated with replacement risk decrease, due to changes in certain market parameters such as interest rates or exchange rates.

## Market Risk

### Definition

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

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

### Market Risk Strategy

pbb Group adheres to the following fundamental principles in relation to market risks:

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

### Market Risk Management Organisation

Positions are monitored by the RMC unit, which is separated from trading in the structural organisation, right through to senior management.

### Market Risk Reports

RMC prepares detailed market risk reports for senior management and operational management purposes, on a daily basis. The daily market risk report, which is primarily addressed to the Management Board, includes:

- > market risk value-at-risk (VaR) and VaR limit utilisations across all relevant levels of the portfolio structure;
- > sensitivities of market risk factors at various levels of detail and monitoring of sensitivity trigger limits;
- > a presentation of economic performance measurement and breakdown by risk factors.

In order to monitor interest rate risk for the period, quarterly reports are provided on changes in net interest income given pre-defined interest rate scenarios – assuming an unchanged balance sheet (the so-called “static NII”).

### Market Risk Measurement and Limits

**Market risk Value-at-Risk** RMC determines VaR attributable to market risk, at an overall as well as partial portfolio level, on a daily basis, using a simulated model based on historical data. All positions are taken into account for determining VaR, whereby the credit spread risk from items classified under IFRS category Amortized Costs (AC) is not taken into consideration within market risk, but in credit risk.

- > The simulation model is based on historical market data of the past ten years, which is incorporated in the simulation with an equal weighting.
- > Individual types of market risk are aggregated to form a total VaR, which forms the basis of limit monitoring.
- > For the purposes of daily operational risk management, VaR is determined using a holding period of ten days and a one-sided 99% confidence interval.

Market risk VaR as at 31 December 2018 amounted to €35 million, taking diversification effects between the individual market risk types into consideration (31 December 2017: €66 million). The reduction in market risk VaR compared to the year-end 2017 was primarily due to reduced credit spread risk. Credit spread risk is considered for all assets measured at fair value through profit or loss (FVPL) or at fair value through other comprehensive income (FVOCI).

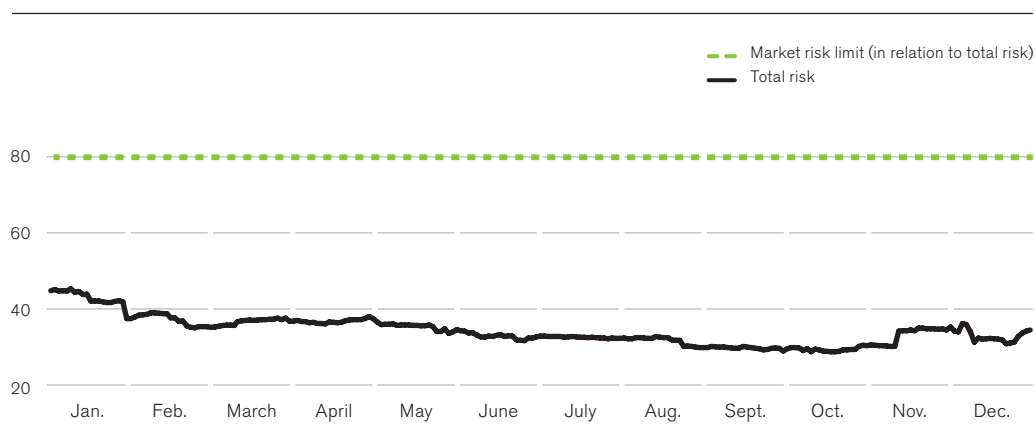
In accordance with IFRS 9, some financial assets previously allocated to the available for sale measurement category now need to be measured at amortised cost (AC). Since credit spread risks are only included in market risk VaR for transactions of measurement categories FVOCI or FVPL, total market risk VaR was reduced upon the changeover to IFRS 9, at the beginning of 2018. Other effects on market risk VaR (besides the initial application of IFRS 9) were of minor importance. Accordingly, the market risk VaR limit was reduced from €100 million to €80 million at the beginning of 2018.

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

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

#### Market risk VaR (10 days, 99%) and market risk limit January to December 2018

in € million



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

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

**Stress Testing** Whilst VaR measures market risk in “normal” market conditions and does not provide a measure for potential maximum losses, stress scenarios are used to map market risk in difficult or even extreme economic framework conditions. pbb Group employs specific hypothetical market risk stress scenarios for key risk drivers, on a monthly basis, to determine the impact of strong to extreme changes in market data (yield curves, foreign exchange rates, credit spreads, volatility and tenor spreads) on the economic present value. Additionally, the impact of historical stress scenarios (or those required by regulators) are simulated.

A 200 basis point parallel upwards or – to the extent applicable – downwards shift in the yield curve would have resulted in a maximum market value loss of €221 million across all of pbb Group's interest rate-sensitive positions (excluding equity) at the end of 2018 (31 December 2017: €239 million).

An extreme widening in the relevant credit spreads – given the applied scenarios – would have resulted in market value losses of €173 million as at end of 2018.

The Management Board and the executive bodies are informed about the results of stress test scenarios on a regular basis.

**Back Testing** The quality of the risk measurement methods in use is checked on an ongoing basis by comparing one-day VaR figures to the actual changes occurring in the portfolio's present value on a daily basis. pbb Group has adopted the Basel Capital Accord's “traffic light” system for the qualitative analysis of its risk model. For this purpose, the number of outliers detected in backtesting within a period of 250 trading days are counted. As at end of 2018, based on a data history of 250 trading days, no outliers were observed. The risk model employed by pbb Group therefore has “green” status, as defined in the “traffic light” system of the Basel Capital Accord.

**Periodic interest** rate risks are outlined using delta static net interest income, simulating changes in net interest income for the period that would occur under pre-defined interest rate scenarios – also assuming an unchanged balance sheet. Calculations are carried out at the end of each quarter, for a simulation horizon covering the following four quarters. Negative deviations from the base value NII are monitored under consideration of a trigger limit (2018: €80 million).

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

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

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

### Market Risk Management, Monitoring and Reduction

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

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

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

**General Interest Rate Risk** The general present value interest rate risk was at €36 million as at end of 2018 compared to €38 million as at end of 2017. Periodic interest rate risk assuming an unchanged balance sheet (delta static NII) was €–22 million at the end of 2018 (end of 2017: €–18 million).

**Volatility Risk** VaR amounted to €3 million as at year-end 2018 (end of 2017: €4 million).

**Credit Spread Risk** Credit spread risk reflects potential changes in the present value of exposures as a result of changes in the corresponding credit spread. The majority of credit spread risk is attributable to assets eligible as cover for Pfandbriefe. The Bank has risk measurement systems in place for calculating credit spread risk for all relevant exposures. Only credit spread risks of holdings classified as FVOCI or FVPL are subject to VaR limits; AC exposures are not subject to these limits. As outlined above, IFRS 9 requires that some financial assets of the previous available-for-sale measurement category now need to be measured at amortised cost; at the beginning of 2018, this led to a decline in credit spread risk. Specifically, credit spread VaR of exposures at FVOCI and FVPL totalled €28 million as at the end of December 2018 (as at end of 2017: €88 million). Other effects on credit spread risk were of minor importance.

**Other Market Risks** The present value of foreign currency risk was €1 million as at end of 2018 (end of 2017: €11 million).

Basis risks include cross-currency spread and tenor spread basis risks (including OIS and Libor/Euribor basis risks); these are quantified and recognised within the framework of the VaR model. All basis risks are included in aggregate VaR and are therefore subject to market risk limitation. The bank reported overnight index risks of €6 million, tenor spread risks of €1 million, and cross-currency spread risks of €2 million on the reporting date.



## Outlook

Regulatory topics and prioritisation of focal topics will continue to require further adjustments to market risks management in the years to come. The introduction of EBA Guideline EBA/GL/2018/02 (Interest Rate Risks in the Banking Book) is of top importance in this context – its implementation is due on 30 June 2019. Moreover, it is fair to expect changes in risk management, resulting from the CRD V/CRR II revision, which had not been completed by the end of 2018. To the extent that further action is required in order to fulfil such new or changed regulatory requirements, suitable measures will be taken to ensure implementation in good time.

## Opportunities

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

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

## Liquidity and Funding Risk

### Definition

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

### Internal Liquidity Adequacy Assessment Process

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

### Liquidity Risk Strategy

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

### Organisation of Liquidity Risk Management

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

### Liquidity Risk Report

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

### Liquidity Risk Measurement and Limits

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

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

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

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

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

The limit system consists of:

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

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

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

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

### Liquidity Risk Monitoring and Management

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

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

### Hedging and Reduction of Liquidity Risk

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

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

### Development of pbb Group's Risk Position

The cumulative liquidity position (liquid assets plus projected net cash flows) determined as part of the liquidity risk measurement process as at 31 December 2018 amounted to €5.0 billion for a 12-month horizon in the base scenario – a €2.0 billion decrease compared to the previous year (based on the same projection horizon). This reduction was caused by a regular repayment of excess liquidity. As at 31 December 2018, the cumulative liquidity position for a six-month horizon amounted to €2.6 billion in the risk scenario (31 December 2017: €2.5 billion). The cumulative liquidity position in the stress scenario for a six-month horizon amounted to €0.9 billion as of 31 December 2018 (31 December 2017: €1.2 billion).

### Regulatory Liquidity Coverage Requirements (Liquidity Coverage Ratio, LCR)

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

The levels determined for pbb Group during 2018 were clearly in excess of 100%. The Liquidity Coverage Ratio as at 31 December 2018 was 212%.

### Funding Markets

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

### Forecast Liquidity Requirement

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

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

### Funding Risk

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

### Market Liquidity Risk

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

### Opportunities

pbb Group's cumulative liquidity position of €5.0 billion in the base scenario over a 12-month horizon, which is detailed in the section "Development of pbb Group's Risk Position", as at 31 December 2018 provides the Group with scope for a flexible response, particularly with regard to possible new business.

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

## Operational Risk (including Legal Risk)

### Definition

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

### Strategy for Operational Risk

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

### Organisation of Operational Risk Management including Legal Risk

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

Compliance and RMC form the second line of defence. Within RMC, the Operational Risk unit is responsible for uniform procedures, instruments and methods for identifying, assessing, monitoring, quantifying and reporting on operational risk throughout the Group. Internal Audit constitutes the third line of defence.

### Risk Reports, Monitoring and Management of Operational Risk including Legal Risk

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

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

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

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

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

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

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

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

### **Risk Measurement**

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

In line with the Standardised Approach according to article 317 et seq. of Regulation 575/2013/EU (CRR), the own funds requirement for operational risk, which is calculated at the end of each year, was €70 million as at 31 December 2018 (31 December 2017: €72 million).

#### **Operational Risks Profile of pbb Group**

pbb Group suffered a financial loss of €6 million from operational risks (including legal risks) during 2018 (2017: €20 million). pbb assesses its operational risk profile (including legal risk) as stable.

#### **Opportunities**

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

### **Business and strategic risk**

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

### **Property Risk**

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

As at 31 December 2018, pbb did not hold any own properties.

### **Pension risk**

Pension risk is defined as the risk of incurring additional expenses due to insufficient capitalisation of pension obligations from defined benefit plans. Please refer to the chapter “Internal Capital Adequacy Assessment Process (ICAAP)” for further details on the quantification as well as the calculation results of the economic capital of pension risk.

## INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS (ICAAP)

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

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

Both perspectives are designed to safeguard the financial institution's ability to survive: they are based on internal assessments of the capital required to safeguard the institution's continued existence. Both perspectives were implemented by pbb Group when the new 2018 risk strategy came into effect.

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

Implemented in 2018, the economic perspective differs from the previous year's going-concern approach, as safeguarding the financial institution's ability to survive is now paramount. For the economic perspective as at 31 December 2018, pbb Group therefore no longer took subordinated items into account when determining available financial resources. Within the economic perspective, risk measurement is primarily based on the approach used in the previous year. The difference is that in order to enhance comparability with regulatory capital requirements, pbb Group slightly lowered the confidence interval – from 99.91% in 2017 to 99.9% in 2018.

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

The risk inventory identified market risk, credit risk, business and strategic risk, operational risk and property risk as higher-level risks for 2018 having an impact on capital and income; accordingly, these five types of risk were included in the ICAAP, and the economic capital of these risk types is quantified using models or other methods. Within these types of risk, there are additional sub-risks on a granular level which were taken into account in the ICAAP during the period under review. Certain material types of risk, such as extension risk, settlement risk, realisation risk for defaulted loans, or pension risk, are integrated into the ICAAP in the form of buffers which are validated on a regular basis. Funding risk is included in business and strategic risk.

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

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

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

### Quantification of economic capital for individual risk types

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

The methods of calculating economic capital for the individual material risk types for 2018 are explained below:

#### Economic capital for Credit Risk

For calculating the credit risk at the portfolio level, pbb Group uses a credit portfolio model which is based on the approach of a so-called asset value model. The fundamental concept used involves the repeated simulation of correlated rating migrations for borrowers, whereby the associated portfolio revaluation is used to derive a statistical distribution of losses – which is in turn used to derive economic capital in terms of unexpected losses. Economic capital quantifies the maximum unexpected loss, given a pre-defined confidence level, which may be incurred due to rating migrations (including defaults) in the lending business within a single year. Besides the loss distribution of the credit portfolio, as a significant result of this process, credit risk capital can be assigned to individual borrower units in line with the risks involved, using the so-called expected shortfall principle. This ensures a risk-adequate allocation to borrowers, and thus constitutes a major cornerstone in the risk-oriented management of the credit portfolio. During the observation period, correlations between borrowers, borrower groups and regions were reviewed during the course of the regular validation process; updated correlations were applied during the fourth quarter of 2018.



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

#### **Economic capital for Market Risk (including Pension Risk)**

The purpose of calculating economic capital for market risk is to identify potential financial losses resulting from price changes affecting all positions. In this process, the potential non-systematic losses are derived from an analysis of historical time series of specific influencing factors (risk factors), including interest rates, exchange rates and credit spreads, over the preceding ten years. The historical observation period for risk factors underlying market risk calculations was extended from seven to ten years in 2018, to ensure that adverse economic phases for the Bank also continue to be adequately taken into account, and captured by the model. Ultimately, using a simulation procedure and applying sensitivities of financial instruments to risk factors, the annual loss distribution of portfolio market value is determined, which allows to determine economic capital at the set confidence level.

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

#### **Economic capital for Operational Risk**

Within the framework of the ICAAP, operational risk is quantified using the so-called loss distribution approach (LDA), whereby distributions for damage amounts and frequency are determined individually, using internal loss data from the loss database. External and scenario-based data is also included in the modelling approach. The full loss distribution is generated using Monte Carlo simulation techniques; diversification effects between the various sub-types of risk and modelling categories are not being considered. Furthermore, care is taken to ensure that the economic capital figure calculated does not fall short of a floor defined at 90% of adjusted regulatory capital determined in accordance with the standardised approach pursuant to the EU Capital Requirements Regulation (575/2013 (EU) – "CRR"). Sub-types of operational risk which can only be partially quantified, or which cannot be quantified at all, such as for instance model risk, are covered by way of a capital buffer.

#### **Economic capital for business and strategic risk**

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

The methodology newly developed in the year under review was first applied as at 31 December 2018. Material changes compared with the previous methodology mainly comprise the re-design of the sub-risk types included in business and strategic risk, which allows for a more accurate modelling of risk causes, as well as the new development of the quantification methodology via Monte Carlo simulation of net interest income, plus a scenario analysis for remaining items in the income statement. The result is an improved methodology in terms of completeness, and accuracy of the measuring method for business and strategic risks.

### Liquidity Risk in the ICAAP

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

### Result of Risk-bearing Capacity Analysis

#### Normative perspective

The normative perspective is geared towards ongoing fulfilment of all of the Bank's capital-related supervisory demands, as well as to the achievement of internal objectives. For a detailed description of the regulatory indicators measured as at the reporting date (CET1 ratio, tier 1 ratio, own funds ratio, MREL and Leverage Ratio), please refer to the chapter "Key regulatory capital ratios (fully phased-in)". The readings for these indicators were non-critical at the reporting date. The future-oriented medium-term analysis of key capital ratios – as required by regulators – did not show any critical values, neither in the base scenario nor in the stress scenarios.

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

#### Going-concern

in € million	31.12.2018	31.12.2017	Change
Credit risk	189	238	-49
Market risk	133	175	-42
Operational risk	24	25	-1
Business and strategic risk	-	-	-
<b>Total before diversification effects</b>	<b>346</b>	<b>438</b>	<b>-93</b>
<b>Total after diversification effects</b>	<b>320</b>	<b>403</b>	<b>-84</b>
Available financial resources (free capital)	1,419	987	432
Excess capital	1,099	584	516

With the first-time application of IFRS 9, the Group has replaced the previous mark-to-market of financial assets with a measurement at amortised cost. As a result, these positions no longer comprise credit spread risks for 2018, which led to a decline in total market risk. The changed measurement approach also reduced credit risk, as rating migration risk of the instruments concerned was no longer relevant, only their default risk. Shorter maturities (compared to the 2017 financial statements) and the repayment of maturing securities additionally contributed to a reduction in credit risk during the period under review. In addition, the enhanced inclusion of lower default correlations of small and medium-sized enterprises in the credit portfolio model had a positive effect during the first quarter of 2018. Operational risk, which is regularly determined once a year, decreased slightly. Since pbb did not hold any properties during the period under review, no details were provided on real estate risk. The declines in market and credit risk were therefore the main reasons for the reduction in total risk after diversification effects.

Available financial resources (so-called 'free capital') is compared to aggregate risk (after diversification effects). Available financial resources increased during the reporting period. Alongside the first-time application of IFRS 9 – which increased CET1 capital, thanks to higher carrying amounts of financial investments – the issue of a subordinated (AT 1) bond as well as the adjustments of the minimum regulatory SREP capital ratios were mainly responsible for the increase.

The reduction in economic capital (after diversification effects) and the simultaneous increase in available financial resources together led to higher excess coverage. Overall, the Bank's risk-bearing capacity at the reporting date was evidenced under this approach.

### Going-concern: Risk according to segments

in € million	31.12.2018	31.12.2017	Change
Real Estate Finance	133	155	-22
Public Investment Finance	12	20	-8
Value Portfolio	95	141	-46
Consolidation & Adjustments	79	87	-8
<b>Total</b>	<b>320</b>	<b>403</b>	<b>-84</b>

The risk reduction in the VP was driven by lower market risk in particular: effects from the first-time application of IFRS 9 led to a decrease in credit spread risks and credit risk in this segment in particular. Lower risk in the REF and PIF segments was mainly driven by lower credit risk. Credit risk in PIF declined due to shorter maturities and the repayment of maturing securities, whilst the reduction in REF was mainly due to a higher weighting of lower correlations of small and medium-sized enterprises, and lower loss ratios in the calculation model.

### Economic perspective

At the beginning of 2018, the "gone-concern" management approach (which was implemented until 2017) was replaced by the economic perspective, which is primarily aimed at safeguarding the Bank's ability to survive. Besides a minor adjustment to the confidence interval (from 99.91% to 99.9%), the changes also included the omission of some of the components of available financial resources. The following table compares the 2017 year-end figures (under the gone-concern approach) with the figures of the economic perspective as at the reporting date:

### Economic perspective

in € million	31.12.2018	31.12.2017	Change
Credit risk	1,245	1,213	33
Market risk	658	883	-225
Operational risk	85	78	7
Business and strategic risk	-	21	-21
<b>Total before diversification effects</b>	<b>1,988</b>	<b>2,195</b>	<b>-207</b>
<b>Total after diversification effects</b>	<b>1,814</b>	<b>1,990</b>	<b>-176</b>
Available financial resources before net hidden losses	2,909	3,179	-270
Net hidden losses	-8	-	-8
<b>Available financial resources</b>	<b>2,901</b>	<b>3,179</b>	<b>-278</b>
Excess capital	1,087	1,189	-102

Aggregate risk (after diversification effects) decreased in the economic perspective during the period under review – predominantly due to lower market risk, business risk, and strategic risk. The reduction in market risk (credit spread risk) partly resulted from lower market values and shorter maturities. However, this development was significantly reinforced by the extension of the historical observation period for calculating market risk – which continues to incorporate unfavourable economic phases, albeit using a lower weighting. The adjustment of the confidence interval only had a minor effect on market risk (€–9 million). Due to the newly-developed method, business and strategic risk dropped to zero, as planned gains exceeded the risk from unexpected losses in this risk category. The rise in credit risk was predominantly driven by internal rating downgrades of some Southern European public-sector debtors. This was partly offset by maturities of financial investments as well as by an improved valuation of securities in the credit portfolio model and the described adjustment to the confidence interval (€–33 million). Operational risk rose, due to the incorporation of new data and analyses. Since the Bank did not hold any properties on the reporting date, no details regarding property risk need to be disclosed.

In contrast, available financial resources declined significantly during the period under review, on account of adjustments in order to comply with the requirements related to the economic perspective in accordance with the ECB's ICAAP Guideline. Essentially, this includes the non-inclusion of tier 2 instruments in the calculation of available financial resources. This effect was only partly offset by the higher level of capital (in accordance with IFRS), reflecting the issue of an AT1 instrument and the first-time application of IFRS 9. Hence, excess coverage increased compared to the 2017 year-end; evidence of the risk-bearing capacity in the economic perspective was thus provided as at the reporting date as well.

Should the European sovereign debt crisis intensify further, with credit spreads widening and credit ratings of European public debtors worsening as a consequence, both a corresponding increase in credit risk as well as a reduction in available financial resources (given an increase in net hidden losses) is to be expected, notwithstanding any countermeasures taken.

#### Economic perspective: Risk according to segments

in € million	31.12.2018	31.12.2017	Change
Real Estate Finance	620	656	–36
Public Investment Finance	175	173	3
Value Portfolio	778	865	–86
Consolidation & Adjustments	240	296	–56
<b>Total</b>	<b>1,814</b>	<b>1,990</b>	<b>–176</b>

Risk exposure in the VP segment declined particularly due to lower credit spread risk and credit risk. In C&A, besides lower market risk, the new methodology concerning business and strategic risk (as mentioned above) was instrumental for the risk reduction. The development in the REF segment was largely attributable to lower credit risk, which in turn reflected the stronger incorporation of lower correlations of small and medium-sized enterprises, as well as the decreases in loss ratios in the credit portfolio model.

## Opportunities

The pbb Group observed a widening of credit spreads on the bond markets of some Southern European countries during the course of 2018: internal credit ratings were partly adjusted accordingly. If confidence in European sovereign budgets were to be restored, narrowing credit spreads and systematic rating improvements for public-sector issuers might reduce risks, thus again strengthening available financial resources and hence, excess coverage in the ICAAP.

## Stress testing

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

As part of an integrated approach, the impact of macroeconomic stress scenarios on all material risks – and on available financial resources under stressed market parameters – was calculated for a horizon of several years during the period under review. These scenarios focus on the impact of protectionism and trade barriers, as well as on an unfavourable development on the real estate markets.

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

## SREP

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

Based on the results of the analysis as well as using benchmark comparison, the ECB may impose minimum capitalisation or liquidity requirements, over and above existing regulatory requirements. As a key result of SREP, pbb Group has been required to maintain a minimum CET1 ratio of 9.125% for 2018 (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). This capital requirement is based on the Basel III transitional rules and comprises a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (P2R: 2.75%) and the capital conservation buffer (CCB: 1.875% phased-in for 2018). Furthermore, pbb Group had to fulfil a total capital requirement of 12.625% in 2018 (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios). It is based on the Basel III transitional rules and comprises a Pillar 1 minimum own funds requirement (8.0%), a Pillar 2 capital requirement (2.75%) and the capital conservation buffer (1.875% phased-in for 2018). Both requirements, the Group complied with at all times during the year under review.

Towards the end of the year under review (draft) as well as in February 2019 (final), the ECB notified pbb Group of the regular annual re-determination of minimum capital requirements for 2019. With effect from 1 March 2019, pbb Group has been required to maintain a minimum CET1 ratio of 9.5% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). This capital requirement is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (P2R: 2.5%) and the capital conservation buffer (CCB: 2.5%). The CET1 minimum capital requirement that applies for 2019 also represents the threshold for mandatory calculation of a so-called maximum distributable amount (MDA). This generally limits distributions to the CET1 capital, new performance-based remuneration, and interest payments on additional Tier 1 capital.

With effect from 1 March 2019 pbb Group has been required to maintain a total capital requirement of 13.0% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). It is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum own funds requirement (8.0%), a Pillar 2 capital requirement (2.5%) and the capital conservation buffer (2.5%).

### Key Regulatory Capital Ratios (fully phased-in)

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

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

The Advanced Internal Rating Based Approach (Advanced IRBA) is used to determine regulatory capital requirements for all material portfolios.

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

## Own Funds

in € million	31.12.2018 Basel III <sup>1)2)3)</sup>	31.12.2017 Basel III <sup>3)4)</sup>
CET1	2,698	2,552
Additional Tier 1	298	–
Tier 1	2,996	2,552
Tier 2	643	675
<b>Own Funds</b>	<b>3,639</b>	<b>3,227</b>

<sup>1)</sup> After confirmation of the 2018 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

<sup>2)</sup> With the introduction of IFRS 9, the new rules governing the classification and measurement of financial assets and regarding the recognition of impairments have impacted regulatory capital. pbb has not applied the optional transitional provisions under IFRS 9.

<sup>3)</sup> After expiry of all Basel III transitional regulations.

<sup>4)</sup> After confirmation of the 2017 financial statements and appropriation of profits.

## Risk-weighted assets (RWA)

in € million	31.12.2018 Basel III <sup>1)</sup>	31.12.2017 Basel III <sup>1)</sup>
Market risks	229	370
thereof interest rate risks	–	–
thereof foreign exchange risks	229	370
Operational risks	870	899
Credit risks	13,285	13,099
thereof CVA charge	262	294
Other RWA	203	147
<b>RWA total</b>	<b>14,587</b>	<b>14,515</b>

<sup>1)</sup> After expiry of all Basel III transitional regulations.

## Capital ratios

in %	31.12.2018 Basel III <sup>1)2)3)</sup>	31.12.2017 Basel III <sup>3)4)</sup>
CET1 Ratio	18.5	17.6
Tier 1 Ratio	20.5	17.6
Own Funds Ratio	24.9	22.2

<sup>1)</sup> After confirmation of the 2018 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

<sup>2)</sup> With the introduction of IFRS 9, the new rules governing the classification and measurement of financial assets and regarding the recognition of impairments have impacted regulatory capital. pbb has not applied the optional transitional provisions under IFRS 9.

<sup>3)</sup> After expiry of all Basel III transitional regulations.

<sup>4)</sup> After confirmation of the 2017 financial statements and appropriation of profits.

## Leverage Ratio

in %	31.12.2018 Basel III <sup>1)</sup>	31.12.2017 Basel III <sup>2)</sup>
Leverage Ratio	5.3	4.5

<sup>1)</sup> After confirmation of the 2018 financial statements, less the proposed dividend (subject to approval by the Annual General Meeting).

<sup>2)</sup> After confirmation of the 2017 financial statements and appropriation of profits.

## MREL

Within the scope of the new resolution and recovery regime (in accordance with the EU BRRD) and in addition to regulatory own funds, institutions are obliged to hold liabilities which can be converted to equity, in the amount of the so-called MREL (Minimum Requirements for Own Funds and Eligible Liabilities) ratio. However, there are clear limitations regarding the scope of converting liabilities (the concept of "bail-in-ability"): in particular, no provider of capital may be put at a disadvantage compared to its position under national insolvency law. For example, this means that deposits covered by a national deposit guarantee scheme are not bail-inable and thus excluded from conversion. Regulators determine the exact level of this ratio individually for each institution; at present, no details are disclosed. pbb's specific MREL requirement is below the currently-discussed level of 8% in terms of Total Eligible Liabilities and Own Funds (TLOF); pbb even markedly exceeds this latter requirement.

## Recovery and Resolution Planning

### Recovery and Resolution Planning

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

### Recovery Planning

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

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

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

### Resolution Planning

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



## INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM RELEVANT FOR THE CONSOLIDATED FINANCIAL REPORTING PROCESS

### Concept

The internal control system and risk management system relevant for the consolidated financial reporting process ("IKS") comprise the principles, processes and measures used to ensure the effectiveness and efficiency of financial reporting, as well as to ensure compliance with statutory provisions. The objective of the IKS system is to ensure that the Consolidated Financial Statements comply with the relevant rules in respect of the Consolidated Financial Statement. Risks that may prevent this overall objective from being achieved are identified and assessed in the process; any risks identified are limited and their effect on the financial statements and their appropriate presentation are reviewed. The IKS is an integral part of the risk management system. It aims to implement controls so as to provide sufficient assurance that, despite the risks identified, the financial statements are prepared in accordance with the relevant rules. However, an IKS cannot provide an absolute guarantee that these goals will be met.

pbb Group's IKS is reflected in its organisational structure and workflows. With respect to the organisational structure, it primarily comprises the Management Board, the Supervisory Board as the supervisory body, the Audit Committee established by the Supervisory Board, the Finance division reporting to CEO/CFO and the Group Finance Committee (GFC).

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

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

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

At 31 December 2018, the CEO/CFO was responsible for Communications, Compliance, Corporate Office/Corporate Development, Digitalisation, Finance, Group Internal Audit, Human Resources, Information Technology and Legal. The Finance division comprises the Accounting, Financial Reporting, Procurement Services & Corporate Controlling, Regulatory Reporting, Tax department as well as the cross-functional Data Governance. The Finance division prepares the Consolidated Financial Statements in accordance with IFRS as applicable in the EU and provides the capital market information relevant to accounting. pbb Group companies and branches prepare their financial statements in accordance with the relevant local legal requirements. These financial statements are standardised around uniform Group accounting policies in accordance with IFRS for the purposes of Group financial reporting. Each entity included in the Consolidated Financial Statements reports its statement of financial position, income statement, and notes to a central department in Group Accounting via the consolidation software. In Group Accounting the data are validated, analysed and consolidated. For the preparation of the unconsolidated annual financial statements, the accounting

policies in accordance with the German Commercial Code (Handelsgesetzbuch, HGB) applied for the financial statements of the corporate headquarters and the branch offices, and are harmonised on the basis of a HGB accounting manual.

The GFC issues recommendations to the Management Board. These include, among other things, establishing and monitoring the accounting and reporting policies as well as workflows for all units and segments. The GFC is composed of the members of the Management Board, the chief representatives (until 31 December 2018) and the managers of the Finance, Risk Management & Control and Treasury divisions.

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

### Implementation

pbb Group implemented the concept for the IKS to identify, assess and limit risks.

pbb Group has introduced a control attestation process to strengthen the IKS. After adjusting for risk, all the significant controls of divisions of pbb Group are recorded and controlled in this process. These key controls are reviewed and confirmed by the divisions in a regular reporting process. Compliance and Group Internal Audit review these in a downstream process.

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

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

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

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

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

As part of the IKS, pbb Group takes measures to combat fraud and intentional violations that negatively impact the Group. Fraud against pbb Group includes theft, embezzlement, or breach of fiduciary duty, as well as intentional accounting errors in connection with the consolidated financial reporting process. pbb Group identifies and evaluates risks and takes measures to prevent such fraudulent activities and intentional violations. In addition, a systems-based concept is used to train employees in compliance regulations.

## Maintenance

pbb Group reviews and improves its IKS on an ongoing basis, amongst others, as part of Management Board and GFC meetings, to ensure that risks are identified, assessed and limited as accurately and as comprehensively as possible. Consequently, the IKS is adapted to new circumstances such as changes to pbb Group's structure and business model or new statutory requirements.

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

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

### Monitoring

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

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

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

# Remuneration Report

The Remuneration Report follows the recommendations of the German Corporate Governance Code (the Code) and includes the information required pursuant to the German Commercial Code (Handelsgesetzbuch – “HGB”) and in accordance with the International Financial Reporting Standards (IFRS).

The first section of the Remuneration Report describes the structure, specifications and amount of remuneration for members of the Management Board and Supervisory Board. The second section of the Remuneration Report provides information on the remuneration system and the remuneration structure for employees of the pbb Group. However, this Remuneration Report does not comprise any quantitative remuneration information on employees, to be disclosed in compliance with Article 450 of the Capital Requirements Regulation (“CRR”) in conjunction with section 16 of the German Regulation on Remuneration in Financial Institutions (Institutsvergütungsverordnung – “InstVergV”). This information is scheduled to be disclosed after completion of the 2018 salary review (variable remuneration not yet established) during the second quarter of 2019, as part of pbb's Remuneration Report (according to the InstVergV). This information will be available online under [www.pfandbriefbank.com](http://www.pfandbriefbank.com) as soon as the salary review is completed. The third section of the Remuneration Report comprises information on the governance structure regarding remuneration.

## REMUNERATION SYSTEM AND REMUNERATION STRATEGY OF THE pbb GROUP

The remuneration system and the remuneration strategy of pbb Group are integral components of the Group's business and risk strategy. The remuneration strategy sets out the framework for the performance and remuneration of Management Board members and employees of the pbb Group. The remuneration strategy was developed as part of the business and risk strategy, involving the relevant business divisions and the Remuneration Officer. All employees of pbb Group have access to the remuneration strategy – updated in 2018 – via the intranet. The remuneration strategy is subject to regular revision, and may be subject to extraordinary revision particularly in case of amendments to the business and risk strategy.

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

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

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

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

## ADJUSTING THE REMUNERATION SYSTEM

Against the background of the InstVergV revision, effective 4 August 2017, pbb Group carried out a review in 2018 regarding the necessity and extent of potential adjustments of its remuneration system due to regulatory requirements; as part of the review, it was also evaluated as to whether any adjustments would be useful and appropriate considering pbb Group's business model and risk situation, taking the overall market environment into account. As at the date of this annual report, the required amendments applicable to the Management Board's remuneration system have already been applied, while the amendments affecting the employee remuneration system are currently being prepared.

The focal point of the amendments was the introduction of a clawback option for variable remuneration already paid out. Moreover, the review identified adjustment requirements regarding the following items: (i) the weighting of Management Board performance measurement criteria, (ii) the modifiers of pbb measurement parameters, used to adjust – within specific limits – the variable remuneration if all of the strict requirements are fulfilled, and (iii) establishment of the institution-specific threshold value applied to increase (employee) risk takers' retained variable remuneration. These amendments will be specified in greater detail in another section of this Remuneration Report.

Between August and November 2018, the Management Board, the Remuneration Committee and the Supervisory Board resolved to apply the majority of the identified amendment requirements. Regarding the clawback option for variable remuneration components, the Management Board gave its go-ahead in December 2018 (after extensive preparations), with subsequent approval from the Remuneration Committee and the Supervisory Board. The clawback resolution was implemented for all Management Board members with retroactive effect as from 1 January 2018. All other adjustments will be applied as from the 2019 financial year. The corresponding implementation preparations were made in 2018.

## MANAGEMENT BOARD

### Principles

In principle, remuneration for members of pbb's Management Board is designed to ensure a performance-oriented payment, taking the Company's size and international business activities into account. Besides a peer review, based on remuneration for Management Boards and senior management roles in similar companies in Germany and abroad, and a comparison to remuneration of all other employees of pbb Group, the Company's financial situation and performance is also taken into account.

## Remuneration Components

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

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

The Remuneration Committee and the plenary meeting of the Supervisory Board discussed the amount, structure and appropriateness of Management Board remuneration in 2018, also involving external advisors.

## Non-performance-related Remuneration

Fixed remuneration levels are reviewed, and adjusted if appropriate, at regular intervals, using an external market survey. No automatic adjustment will take place. In 2018, fixed remuneration amounted to € 500,000 gross per annum for each Management Board member.

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

## Performance-related Variable Remuneration

pbb's variable remuneration system is in line with the regulatory requirements as set out in the CRD IV, the German Banking Act (Kreditwesengesetz – "KWG") and the requirements of the German Stock Corporation Act (Aktengesetz – "AktG"), and the German Corporate Governance Code (the "Code"). Moreover, provisions under contractual arrangements as well as the remuneration principles of the German Financial Markets Stabilisation Fund (FMS) (as amended in February 2012) were observed. In 2018, pbb reviewed, resolved and applied adjustments to its remuneration system in order to implement the latest InstVergV amendments.

Variable remuneration is paid in cash. The amount of variable remuneration partly depends on the performance of the pbb share (share-based remuneration system). As in previous years, pbb Group did not grant any share options to Management Board members in 2018.

The variable remuneration component is determined on the basis of an individual calculatory reference value. This is a reference value which reflects the amount of variable remuneration attributed to a performance level of 100% on all relevant performance levels. The calculatory reference value for 2018 has been set at € 240,000 for the Chairman of the Management Board, and at € 200,000 for all other Management Board members. By increasing the calculatory reference value of the Chairman of the Management Board, pbb takes appropriately into account the customary difference in remuneration between the Chairman of the Management Board and the other Management Board members, and follows the overall development customary in the market regarding the remuneration of Management Board chairmen.

The variable remuneration granted to each Management Board member is capped at 150% of his/her individual calculatory reference value. According to section 25a (5) sentence 2 of the KWG, the variable remuneration may not exceed 100% of fixed remuneration.

According to section 25a (5) sentence 5 of the KWG, pbb's Annual General Meeting may increase this threshold to 200% of fixed remuneration. However, no such resolution was taken by pbb's Annual General Meeting so far.

The service contracts entered into with the members of the Management Board comprise a total threshold value in line with section 4.2.3. of the DCGK. According to these contractual stipulations, the total remuneration for the Chairman of the Management Board for a given calendar year is capped at €910,000, and at €850,000 for all other Management Board members, including basic annual remuneration, variable remuneration and fringe benefits.

### **Examination of Requirements according to section 7 of the InstVergV**

Granting of variable remuneration to Management Board members is subject to the prior determination of a total amount of variable remuneration by the Supervisory Board (taking into account the requirements of section 7 of the InstVergV). This amount is determined at the end of each financial year, within the framework of a formal and transparent process. The Supervisory Board approved total amount of variable remuneration to be granted for 2018 as part of its review in 2019. For the examination of requirements according to section 7 of the InstVergV, pbb uses relevant recovery threshold values as indicators in line with the reporting on recovery and resolution plans (in accordance with the EU SRM Regulation and the German Act on Restructuring and Resolution (Sanierungs- und Abwicklungsgesetz – "SAG"). Provided all requirements were fulfilled, and the Group disclosed (positive) consolidated profit in its IFRS financial statements, a total amount available for disbursement as variable remuneration is then determined. As a rule, if a consolidated net loss was disclosed – in particular if such net loss translated into a depreciation of the enterprise value – no total amount available for disbursement as variable remuneration at pbb is determined.

### **Performance Measurement**

The amount of variable remuneration for 2018 is determined on three levels: (i) the institution's performance, (ii) the performance of the organisational unit (the Management Board member's respective division) and (iii) the Management Board member's individual performance.

As the first step of performance measurement, the calculatory reference values (as adjusted through the determination of the total amount of variable remuneration) are distributed among the three performance measurement levels. Until and including 2018, 80% is allocated to an institution pool, 10% to the respective division pool, and 10% to the individual performance of the respective Management Board member. On this basis, the performance achieved at the institutional, divisional, and individual levels is evaluated, and a specific share of the calculatory reference value is calculated and allocated to the respective member of the Management Board (envisaged personal reward value – "EPR value").

Effective 2019, 60% will be allocated to the institution pool, while 40% will be allocated to the divisional and individual performance on a combined basis. These amendments were introduced for two reasons: first, pbb Group takes into account the regulatory requirement to balance the weighting of all performance measurement levels. Second, the overall responsibility of the Management Board for pbb Group's success is still reflected appropriately.

The Supervisory Board reviewed and approved the 2018 target agreements with Management Board members in November 2017. As part of the corresponding performance determination, the Supervisory Board also reviewed and approved the institutional targets, the divisional targets and the individual targets, and established the level of target achievement in February/March 2019. As in the previous year, the institution's performance for 2018 was calculated as follows: the level of target achievement for the (adjusted) IFRS consolidated profit before tax, plus the level of target achievement for the risk-reward profile, determined as the ratio between net margin x average portfolio volume and risk-weighted assets. Furthermore, additional modifiers may have an impact on overall target achievement at institutional level, including – in particular – general and administrative expenses, efficiency projects, and the total capital ratio.

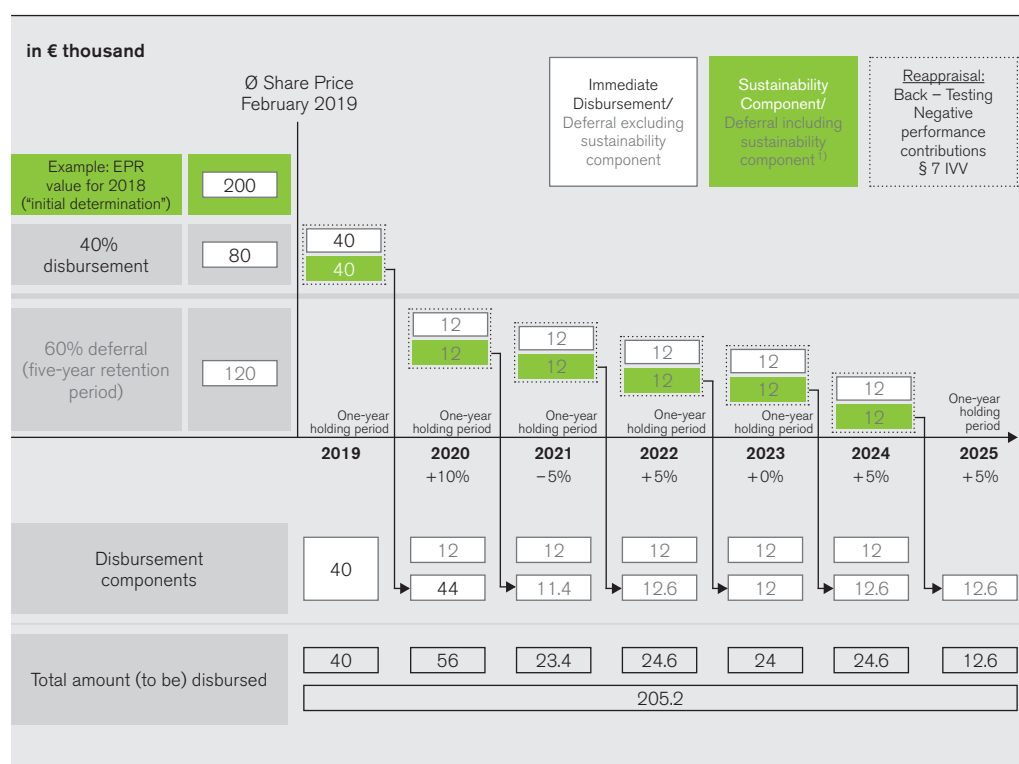


As from 2019, the modifiers will only be applied in the case of unpredictable changes in the Bank's environment that are beyond the Bank's control. For instance, the list of modifiers with a potential impact on target achievement at institutional level includes the following items: short-term changes of regulatory requirements considered material to pbb Group, short-term macroeconomic events, one-off effects or foreign trade limitations due to the acquisition or disposal of material business units, particularly in the case of external M&A activities.

The target achievement at institutional level relevant to the variable remuneration in 2018 depends on the institution's performance in the financial years 2016, 2017 and 2018 – each year contributing 33% to overall target achievement, respectively. Against this background, the variable remuneration has a multiple-year assessment basis as well, and relates to the long-term success of the pbb Group.

The divisional and individual targets were derived from the corporate targets and the business plans made for the respective financial year. In 2018, the target agreements with the Management Board members comprised targets on new business volume, risk management levels and funding, and particularly targets regarding strategic projects, such as the implementation of the business strategy in the US, the promotion of talents and women, the expansion and diversification of the investor base, as well as the further development of pbb's business model.

#### Disbursement system variable remuneration Management Board members (example; based on target achievement of 100%)



<sup>1)</sup> Within the framework of the sustainability component, variable remuneration is adjusted in line with the share price performance, which may have developed positively or negatively. Both positive and negative developments were used for the purposes of the example shown.

### Disbursement Structure

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

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

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

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

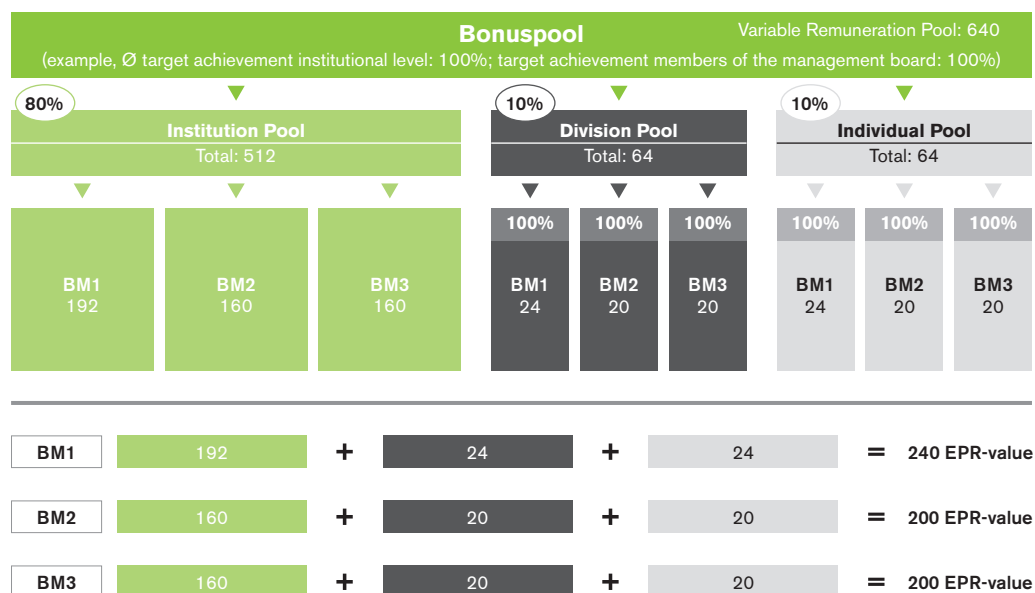
When granting deferral portions, the Supervisory Board takes into account – as part of a retrospective review of the variable remuneration (ex-post risk adjustment) – any subsequent negative deviations affecting the performance of the institution, the organisational unit, or the individual Management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

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

Effective 1 January 2018, the conditions to apply clawback options for variable remuneration already paid out was contractually agreed upon with all Management Board members. According to the contractual stipulations, clawbacks particularly apply if a Management Board member engaged in conduct that was responsible for (or made a material contribution to) significant losses or a material regulatory sanction for the Bank. The same applies if a Management Board member breached external or internal provisions related to suitability and conduct to a serious degree. In its specific implementation of the InstVergV criteria for clawback purposes, pbb Group considers and applies all

regulatory requirements, taking the distinctive features of pbb Group's business model and risk profile into account, and reflecting the overall sustainability aspects of the Company's performance – as well as the synchronisation of Company performance and bonus payments. Clawbacks may be applied up to seven years after the disbursement amount of variable remuneration was paid out.

in € thousand



BM: Member of the Management Board

## Conclusion and Termination of Service Contracts

No new service contracts were concluded in 2018.

As from 1 January 2019, Marcus Schulte was appointed Management Board member, and the prepared service contract became effective. As with all other Management Board members, the fixed remuneration for Marcus Schulte amounts to a gross amount of €500,000 per year. The calculatory reference value for 2019 amounts to €200,000. Marcus Schulte receives fringe benefits (non-cash benefits) comparable to those of other Management Board members.

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

Pursuant to section 4.2.5 of the Code, which has been detailed further by way of sample tables attached to the Code, disclosures shall comprise for each current Management Board member in the 2018 financial year (i) the benefits abstractly granted (including target or expected values), as well as (ii) the actual cash flow received (i.e. the actual amounts disbursed). Both benefits and allocations must be broken down by fixed remuneration, non-cash benefits, variable remuneration and pension expenses (service cost as defined under IAS 19). For reasons of clarity, these details have been compiled into a single table for each member of the Management Board in office during 2018.

**Andreas Arndt**  
CEO/CFO

in € thousand	Benefits granted			Allocation		
	2018	Minimum	Maximum	2017	2018	2017
Fixed remuneration	500	500	500	500	500	500
Fringe benefits <sup>1)</sup>	13	13	13	18	13	18
<b>Total</b>	<b>513</b>	<b>513</b>	<b>513</b>	<b>518</b>	<b>513</b>	<b>518</b>
One-year variable remuneration for 2018	60	–	72	–	–	–
Multi-year variable remuneration for 2018						
Disbursement portion subject to holding period 2018 (second quarter 2020) <sup>2)</sup>	60	–	72	–	–	–
Deferral 2018 (second quarter 2020) <sup>2)</sup>	36	–	43	–	–	–
Deferral 2018 (second quarter 2021) <sup>2)</sup>	36	–	43	–	–	–
Deferral 2018 (second quarter 2022) <sup>2)</sup>	36	–	43	–	–	–
Deferral 2018 (second quarter 2023) <sup>2)</sup>	36	–	43	–	–	–
Deferral 2018 (second quarter 2024) <sup>2)</sup>	36	–	43	–	–	–
One-year variable remuneration for 2017	–	–	–	50	50	–
Multi-year variable remuneration for 2017						
Disbursement portion subject to holding period 2017 (second quarter 2019) <sup>2)</sup>	–	–	–	50	–	–
Deferral 2017 (second quarter 2019)	–	–	–	30	–	–
Deferral 2017 (second quarter 2020)	–	–	–	30	–	–
Deferral 2017 (second quarter 2021)	–	–	–	30	–	–
Deferral 2017 (second quarter 2022)	–	–	–	30	–	–
Deferral 2017 (second quarter 2023)	–	–	–	30	–	–
One-year variable remuneration for 2016	–	–	–	–	–	49
Multi-year variable remuneration for 2016						
Disbursement portion subject to holding period 2016 (second quarter 2018)	–	–	–	–	72	–
Deferral 2016 (second quarter 2018)	–	–	–	–	15	–
<b>Total</b>	<b>813</b>	<b>513</b>	<b>872</b>	<b>768</b>	<b>650</b>	<b>567</b>
Service <sup>3)</sup>	631	631	631	696	631	696
Total remuneration	1,444	1,144	1,503	1,464	1,281	1,263

<sup>1)</sup> Including taxable non-cash benefits within the customary scope.

<sup>2)</sup> The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.

<sup>3)</sup> Service expenses according to the German Commercial Code (HGB) amounted to € 503,000 in 2018 (2017: € 446,000).

## Thomas Köntgen

Deputy CEO,  
Treasury and Real Estate Finance

in € thousand	Benefits granted			Allocation		
	2018	Minimum	Maximum	2017	2018	2017
Fixed remuneration	500	500	500	500	500	500
Fringe benefits <sup>1)</sup>	19	19	19	25	19	25
<b>Total</b>	<b>519</b>	<b>519</b>	<b>519</b>	<b>525</b>	<b>519</b>	<b>525</b>
One-year variable remuneration for 2018	50	-	60	-	-	-
Multi-year variable remuneration for 2018						
Disbursement portion subject to holding period 2018 (second quarter 2020) <sup>2)</sup>	50	-	60	-	-	-
Deferral 2018 (second quarter 2020) <sup>2)</sup>	30	-	36	-	-	-
Deferral 2018 (second quarter 2021) <sup>2)</sup>	30	-	36	-	-	-
Deferral 2018 (second quarter 2022) <sup>2)</sup>	30	-	36	-	-	-
Deferral 2018 (second quarter 2023) <sup>2)</sup>	30	-	36	-	-	-
Deferral 2018 (second quarter 2024) <sup>2)</sup>	30	-	36	-	-	-
One-year variable remuneration for 2017	-	-	-	50	50	-
Multi-year variable remuneration for 2017						
Disbursement portion subject to holding period 2017 (second quarter 2019) <sup>2)</sup>	-	-	-	50	-	-
Deferral 2017 (second quarter 2019)	-	-	-	30	-	-
Deferral 2017 (second quarter 2020)	-	-	-	30	-	-
Deferral 2017 (second quarter 2021)	-	-	-	30	-	-
Deferral 2017 (second quarter 2022)	-	-	-	30	-	-
Deferral 2017 (second quarter 2023)	-	-	-	30	-	-
One-year variable remuneration for 2016	-	-	-	-	-	49
Multi-year variable remuneration for 2016						
Disbursement portion subject to holding period 2016 (second quarter 2018)	-	-	-	-	72	-
Deferral 2016 (second quarter 2018)	-	-	-	-	15	-
<b>Total</b>	<b>769</b>	<b>519</b>	<b>819</b>	<b>775</b>	<b>656</b>	<b>574</b>
Service <sup>3)</sup>	583	583	583	663	583	663
Total remuneration	1,352	1,102	1,402	1,438	1,239	1,237

<sup>1)</sup> Including taxable non-cash benefits within the customary scope.

<sup>2)</sup> The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.

<sup>3)</sup> Service expenses according to the German Commercial Code (HGB) amounted to €388,000 in 2018 (2017: €343,000).

## Andreas Schenk

in € thousand	Benefits granted			Allocation		
	2018	Minimum	Maximum	2017	2018	2017
Fixed remuneration	500	500	500	500	500	500
Fringe benefits <sup>1)</sup>	9	9	9	9	9	9
<b>Total</b>	<b>509</b>	<b>509</b>	<b>509</b>	<b>509</b>	<b>509</b>	<b>509</b>
One-year variable remuneration for 2018	50	–	60	–	–	–
Multi-year variable remuneration for 2018						
Disbursement portion subject to holding period 2018 (second quarter 2020) <sup>2)</sup>	50	–	60	–	–	–
Deferral 2018 (second quarter 2020) <sup>2)</sup>	30	–	36	–	–	–
Deferral 2018 (second quarter 2021) <sup>2)</sup>	30	–	36	–	–	–
Deferral 2018 (second quarter 2022) <sup>2)</sup>	30	–	36	–	–	–
Deferral 2018 (second quarter 2023) <sup>2)</sup>	30	–	36	–	–	–
Deferral 2018 (second quarter 2024) <sup>2)</sup>	30	–	36	–	–	–
One-year variable remuneration for 2017	–	–	–	50	50	–
Multi-year variable remuneration for 2017						
Disbursement portion subject to holding period 2017 (second quarter 2019) <sup>2)</sup>	–	–	–	50	–	–
Deferral 2017 (second quarter 2019)	–	–	–	30	–	–
Deferral 2017 (second quarter 2020)	–	–	–	30	–	–
Deferral 2017 (second quarter 2021)	–	–	–	30	–	–
Deferral 2017 (second quarter 2022)	–	–	–	30	–	–
Deferral 2017 (second quarter 2023)	–	–	–	30	–	–
One-year variable remuneration for 2016	–	–	–	–	–	49
Multi-year variable remuneration for 2016						
Disbursement portion subject to holding period 2016 (second quarter 2018)	–	–	–	–	72	–
Deferral 2016 (second quarter 2018)	–	–	–	–	15	–
<b>Total</b>	<b>759</b>	<b>509</b>	<b>809</b>	<b>759</b>	<b>646</b>	<b>558</b>
Service <sup>3)</sup>	526	526	526	611	526	611
Total remuneration	1,285	1,035	1,335	1,370	1,172	1,169

<sup>1)</sup> Including taxable non-cash benefits within the customary scope.

<sup>2)</sup> The disclosed maximum amounts may be exceeded at allocation, given pbb's share price performance.

<sup>3)</sup> Service expenses according to the German Commercial Code (HGB) amounted to €317,000 in 2018 (2017: €277,000).

## Pension Commitments

Contractual commitments to pension benefits for old age, for occupational and general disability were made to members of the Management Board who were in office in 2018.

As a member of pbb's Management Board, Andreas Arndt receives a pension in the amount of 5.2% of his basic annual remuneration for each completed year of service, subject to a cap of 60%. The pension entitlements are considered to be immediately vested. They may be drawn upon once the age of 62 has been reached.

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

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

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

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

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

#### Pension commitments to Management Board members of pbb<sup>1)</sup> in office during the financial year 2018 according to IFRS<sup>2)</sup>

in € thousand	2018				2017			
	Present value of pension claims vested during the business year	Interest expenses	Past service costs	Pension obligation as at 31.12.2018	Present value of pension claims vested during the business year	Interest expenses	Past service costs	Pension obligation as at 31.12.2017
Andreas Arndt	631	36	–	2,575	696	21	–	1,904
Thomas Köntgen	583	36	–	2,445	663	22	–	1,867
Andreas Schenk	526	30	–	2,054	611	18	–	1,546
<b>Total</b>	<b>1,740</b>	<b>102</b>	<b>–</b>	<b>7,074</b>	<b>1,970</b>	<b>61</b>	<b>–</b>	<b>5,317</b>

<sup>1)</sup> For details concerning pension commitments to former members of the Management Board and their surviving dependants, please refer to the Notes.

<sup>2)</sup> Statements without salary conversion.

#### Pension commitments to Management Board members of pbb<sup>1)</sup> in office during the financial year according to HGB<sup>2)</sup>

in € thousand	2018		2017	
	Provisions for pensions as at 31.12.2018	Additions to provisions for pensions	Provisions for pensions as at 31.12.2017	Additions to provisions for pensions
Andreas Arndt	2,121	704	1,417	553
Thomas Köntgen	1,836	621	1,215	464
Andreas Schenk	1,450	530	920	381
<b>Total</b>	<b>5,407</b>	<b>1,855</b>	<b>3,552</b>	<b>1,398</b>

<sup>1)</sup> For details concerning pension commitments to former members of the Management Board and their surviving dependants, please refer to the Notes.

<sup>2)</sup> Statements without salary conversion.

## Other Provisions

All Management Board members have waived any transitional allowance by signing their currently applicable service contracts.

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

To the best of our knowledge, no member of the Management Board received payments from or benefits committed upon by third parties, by reference to the office held as member of the Management Board of pbb during the year under review. The service contracts entered into with the members of the Management Board do not contain any clauses for severance pay upon a change of control.

No compensation agreements, as defined in section 315a (1) no. 9 of the HGB, which provide for compensation in the event of a takeover bid, have been entered into with Management Board members or employees.

## SUPERVISORY BOARD

In accordance with section 11 (1) of the Memorandum and Articles of Association, the members of the Supervisory Board receive a basic annual remuneration of €30,000. The Chairman receives two-and-a-half times this amount and the Deputy Chairman one-and-a-half times this amount. The fixed remuneration is increased by €10,000 p.a. for any Supervisory Board committee member, and by twice this amount for chairmanship of a Supervisory Board committee. Remuneration entitlements accrue on a pro rata basis for the period of the appointment in each case.

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

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

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



## Remuneration for members of pbb's Supervisory Board in 2018<sup>1)</sup>

in €	2018					2017
	Basic remuneration and remuneration for committee work	Attendance fees	Subtotal	Value-added tax (19%)	Total	Total
Dr Günther Bräunig	129,712.33	11,000.00	140,712.33	26,735.34	167,447.67	176,715.00
Dr Jutta Dönges (since 21.6.2018)	26,575.34	3,500.00	30,075.34	5,714.32	35,789.66	–
Dr Thomas Duhnkrack	40,000.00	5,500.00	45,500.00	8,645.00	54,145.00	52,955.00
Dr Christian Gebauer-Rochholz <sup>2)</sup>	30,000.00	3,000.00	33,000.00	6,270.00	39,270.00	39,270.00
Dagmar Kollmann <sup>3)</sup>	90,315.07	10,500.00	100,815.07	19,154.86	119,969.93	114,835.00
Georg Kordick <sup>2)</sup>	30,000.00	2,500.00	32,500.00	6,175.00	38,675.00	39,270.00
Joachim Plesser	70,000.00	9,500.00	79,500.00	15,105.00	94,605.00	96,390.00
Oliver Puhl	40,000.00	4,500.00	44,500.00	8,455.00	52,955.00	52,955.00
Heike Theißing <sup>2)</sup>	40,000.00	5,000.00	45,000.00	8,550.00	53,550.00	53,550.00
Dr Hedda von Wedel (until 21.6.2018)	23,561.64	4,500.00	28,061.64	5,331.71	33,393.36	68,425.00
<b>Total</b>	<b>520,164.38</b>	<b>59,500.00</b>	<b>579,664.38</b>	<b>110,136.23</b>	<b>689,800.62</b>	<b>694,365.00</b>

<sup>1)</sup> The table does not specify the cost of the D&O liability insurance policy taken out in favour of Supervisory Board members. pbb has entered into a group insurance policy which, in addition to the Supervisory Board members, also covers the members of the Management Board as well as staff members of pbb and its associates. The total cost of this D&O liability insurance policy amounts to approximately €1.44 million p.a., plus insurance tax. The table does not specify the remuneration of the employee representatives provided under their individual employment contracts.

<sup>2)</sup> Employee representative.

<sup>3)</sup> No value-added tax applies, due to the member's domicile abroad. pbb pays tax on behalf of the Supervisory Board member.

## EMPLOYEE REMUNERATION

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

### Remuneration Components

In the financial year 2018, total remuneration of senior staff and employees comprised the following elements:

- > non-performance-related (monetary) remuneration, including social insurance and fringe benefits
- > performance-related variable remuneration

### Non-performance-related Remuneration

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

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

## Performance-related Variable Remuneration

The key elements of the variable remuneration system were harmonised for Management Board members and employees. This applies to the following elements:

- > the examination of requirements for determining the total amount of the variable remuneration, and
- > the risk-adjusted performance measurement parameter at the level of the institution;
- > the maximum level of target achievement (150%);
- > the disbursement structure for risk takers; and
- > determination of the variable remuneration component on the basis of an individual calculatory reference value.

### Performance Measurement

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

The qualitative and quantitative divisional targets are established on an annual basis and derived from the corporate targets and the business plans made for the respective financial year. The establishment of targets commences with the setting of overall corporate strategic priorities by the Management Board, in order to facilitate the management of divisional targets. In particular, qualitative divisional targets are established on this basis. In a second step, quantifiable targets are defined which have to be related to key performance indicators, such as new business volume, new business margins, cost budgets, etc. Furthermore, the targets have to be closely connected with the corporate planning for the current – or future – financial year(s). If possible, qualitative targets are to be based on quantifiable indicators as well, and the target level of 100% has to be defined. The link to the corporate business and risk strategy shall be reviewed and documented for every divisional target. This will ensure that the divisional targets were derived from – and synchronised with – the strategic targets according to pbb Group's business and risk planning. The Management Board of pbb adopts the divisional targets, which have to be provided to all employees of the respective division at the beginning of the year.

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

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

## Disbursement Structure

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

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

The requirements to the disbursement of variable remuneration, pursuant to section 20 of the InstVergV, were implemented on a uniform basis for Management Board members and employees. This applies in particular to:

- > the deferral portion (60% for Management Board members and second-level managers; 40% for all other risk takers);
- > the deferral period (five years for Management Board members and second-level managers; three years for all other risk takers) and the rule governing the (pro rata) vesting of deferrals;
- > back-testing and malus test; as well as – currently being implemented – clawback; and
- > the sustainability component.

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

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

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

- > function of senior manager or other form of executive position
- > loan-granting competences
- > voting rights in important committees, and
- > remuneration of the employee.

In total, besides the three members of the Management Board, a further 100 employees (2017: four Management Board members and 91 employees) were identified as risk takers in 2018. The Management Board informed the Supervisory Board concerning the identified risk takers, while the details of the internal risk analysis were documented.

## Additional Provisions of the Adjusted Remuneration System

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

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

### Hedging ban (section 8 of the InstVergV)

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

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

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

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

## GOVERNANCE OF REMUNERATION SYSTEMS

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

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

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

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

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

The Remuneration Committee consists of the Supervisory Board's Chairman and Deputy Chairperson, as well as one shareholder and one employee representative. The Remuneration Committee convened five times during 2018.

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

# Report on Expected Developments

## MACROECONOMIC FORECAST

Despite weaker growth rates, the macroeconomic environment is forecast to remain positive in 2019. In its outlook, the International Monetary Fund (IMF) emphasises increased downside risk. It suggests that global economic growth will slow down in 2019. At 3.5%, it would be 0.2 percentage points lower than in 2018.

Developed economies have already surpassed their peak levels: the IMF expects a slowdown, from 2.3% in 2018 to 2.0% in 2019. The forecast is based on the fact that the strong growth seen in the past years reflected the cyclical recovery following the financial crisis. This may have now run its course. The effects of the monetary policy normalisation and geopolitical uncertainty are additional burdening factors. In an environment with diminishing free resources – especially on the labour market – inflation rates should continue to trend upwards, with prices expected to increase by 1.7% in 2019 (2018: 2.0%).

Growth rates in the euro area are anticipated to fall below the previous year's levels: the IMF forecasts an increase of 1.6%, whereas estimated growth in 2018 amounted to 1.8%. Domestic demand – particularly private consumption, supported by rising employment levels and higher wages – remains the main growth driver. Within the euro area, the growth rate in France is expected to remain at the previous year's level of 1.5%, whilst difficulties in the automotive sector and a slow-down in export demand should result in a slightly weaker growth in Germany (2019: 1.3%, and thus 0.2 percentage points below the level seen in 2018). Significantly declining economic momentum is projected for Italy (with growth rates set to decline from 1.0% in 2018 to 0.6% year-on-year) and Spain (from 2.5% in 2018 to 2.2% year-on-year).

The economic situation in the United Kingdom is closely linked to the outcome of negotiations surrounding the country's exit from the EU ("Brexit"). However, a departure on 29 March 2019 without an agreement on the future relationship with the European Union (EU) would also have negative implications for the remaining 27 member states. The International Monetary Fund expects a slight increase of the UK's GDP growth rate in 2019, to 1.5% from 1.4% in 2018.

Growth momentum in Sweden should continue to ease, from an estimated 2.4% in 2018 to 2.2% in 2019. In contrast, growth rates in Eastern Europe are expected to remain relatively strong: at 3.0% in the Czech Republic, 3.3% in Hungary, 3.4% in Slovenia, and 3.5% in Poland.

For the US, growth of 2.5% is anticipated for 2019. Impulses from the tax reform adopted in 2017 and other fiscal measures continue to support growth, albeit less so than in 2018, when growth amounted to nearly 3%. Monetary policy – continuing on its path of normalisation in 2018 – is probably one of the reasons for the slightly lower momentum.

Inflation in the euro area is likely to remain on the previous year's level of 1.7%, i.e. near the ECB's inflation target of approximately 2%. Following the termination of the ECB's government bond purchase programme in December 2018, mature bonds are being reinvested. Whilst the duration of these reinvestments has yet to be determined, the ECB has stated that they will continue for a good while after the first interest rate hike, which, in turn, is not expected before the autumn of 2019.

The Bank of England seeks to tighten its monetary policy, so as to counteract the miss of its 2% inflation target. In 2018, the UK consumer prices index is thought to have risen by 2.5%; in 2019, the inflation rate is projected to climb by 2.2%. However, the next steps will be steeply impacted by the outcome of the Brexit negotiations. A "hard" Brexit could prompt the European Central Bank to lower its key interest rate once again.

In the US, the Fed anticipates two further interest rate hikes this year, and characterises the current level of 2.5% to be near the level it deems neutral. In view of the slowdown of global economic growth and the distortions on the financial markets, at the beginning of the year the Fed had announced it would significantly slow down its path of normalisation in the months to come. Inflation is projected to be lower in 2019 (2.1%) than in the previous year (estimated 2.4%).

The trend of a tightening monetary policy visible in all developed economies except Japan should also impact the interest rate environment, and be accompanied by rising long-term interest rates.

Sources: Bloomberg, ECB, IM

## SECTOR-SPECIFIC FORECASTS

### Overall Situation in the Banking Sector

Despite the successes with regard to raising capital and reducing non-performing loans, the European banking sector will continue to operate in a difficult environment during 2019.

Many banks within the euro area, especially in Italy, are still burdened by non-performing loans, even though their share has been declining for some time. Fierce competition, the low interest rate environment, and regulatory costs are further factors negatively impacting profitability. Furthermore, turbulence on the financial markets as a result of geopolitical risks, or due to a crisis in emerging markets, or in the market for bonds issued by companies with low credit quality, can have additional adverse effects.

Sources: Bloomberg, ECB

### Real Estate Finance

Prospects for real estate markets in both Europe and the US are generally considered to be stable. However, should growth in the EU slow down even further and the economic improvement seen in the periphery of the euro area in the last years turn out to be unsustainable, the stronger economies might catch a cold, potentially leading to stronger implications for the individual real estate markets compared to the current status quo. Conservative investors continue to regard the relatively stable markets for first-class European property as interesting, also in Central and Northern Europe. Last but not least, the persistent low interest rate environment should continue to benefit the real estate asset class.

As a rule, the financing capacities of credit institutions and alternative lenders should suffice, even though many providers seem to be planning to reduce their new business origination, or at best keep it at a stable level. pbb Group thus anticipates ongoing margin pressure.

Sources: research by Jones Lang Lasalle, BNP Paribas Real Estate

## Public Investment Finance

Whilst markets are mainly focusing on government lending, in some cases local and regional governments are in better shape (for example, regarding ratings and economic output per capita) than the respective sovereign government.

Competition remains fierce due to the recently extremely loose monetary policy pursued by the European Central Bank and the resulting low interest rate environment. Despite the ECB terminating its government bond purchase programme in December 2018, it will continue to reinvest in maturing bonds. In addition, a key interest rate adjustment is expected at the earliest in the autumn of 2019. Hence, the interest rate environment should hardly change and investors hunting for yield are likely to continue shaping market sentiment. Competition is further intensified by the fact that public-sector banks as well as public-sector development and promotional banks account for the lion's share of municipal financing in many of pbb Group's core markets. In addition, institutional investors entering the market as direct lenders for the public sector and public-sector investments are heating up competition.

At the same time, public-sector investments are being postponed due to budget restrictions or local situations (e.g. merging French regions, Brexit). Therefore, the market environment for new business generated within the EU should be considered carefully in the medium and long term.

Against this background, the European Commission expects public-sector investments in the euro area to grow by 3.0% in 2019 and thus slightly less than the estimated increase of 3.3% in 2018.

## Value Portfolio

pbb Group anticipates a tense market environment in 2019 as a result of the existing uncertainties. An improvement – especially in the periphery – is unlikely. In this context, the Italian credit spread will play a special role.

## Funding Markets

The ECB's interest rates should remain at the current level, at least over the summer of 2019. The US Federal Reserve is forecasting a slightly more moderate economic growth in the United States; hence, the interest rate hike could be less pronounced in 2019. At the FOMC Meeting in December 2018, the members of the Federal Open Market Committee projected two interest rate hikes in 2019. In the United Kingdom, Brexit will continue to dominate the market and the Bank of England's further monetary policy measures.

The gradual reduction of the ECB purchase programme has significantly widened Pfandbriefe and unsecured bond spreads since mid-2018. This development was reinforced by the strong issuing activity at the beginning of the first quarter of 2019. Due to the termination of the purchase programme and political risks, pbb Group expects more volatile financial markets in future.



## COMPANY FORECASTS

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

### Future Developments in Assets, Financial Position and Earnings

In the financial year 2019, the key performance indicators – as defined in the chapter “Internal Management System” – are expected to develop as follows:

Key performance indicator	Initial position (financial year 2018)	Forecast (financial year 2019)
New business volume Real Estate Finance (including prolongations with maturities of more than one year)	€9.5 billion	A volume of between €8.5 billion and €9.5 billion is aimed.
Financing volume Real Estate Finance	€26.8 billion	A slight increase is aimed.
Profit or loss before tax	€215 million	A profit in a range between €170 million and €190 million is aimed.
Cost-income ratio	44.2%	A slight increase is expected.
Return on equity after tax	5.9%	A range between 3.5% and 4.5% is aimed.
CET1 ratio	18.5%	pbb Group aims to achieve a CET1 ratio significantly above the SREP ratio of 9.5% that banks have to comply with in addition to the country-specific (and thus portfolio-specific) varying counter-cyclical capital buffer.

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

In 2019, the Real Estate Finance (REF) segment is expected to once again contribute the lion's share of profit before taxes. The Public Investment Finance (PIF) and Value Portfolio (VP) segments are anticipated to generate slightly positive profit before taxes.

## Opportunities and Risks

### Politics

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

### Economy

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

### Interest Rates

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

### Competition

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

### Digitalisation

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

### Regulatory Environment

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

Within the scope of the SREP, a CET1 minimum ratio and an own funds minimum ratio were set for pbb Group. It cannot be ruled out that the ECB defines even higher capital requirements, or even higher capital ratios in future. This could impact pbb Group's assets, financial position and earnings. Further relevant supervisory requirements with a probable impact on pbb Group and the potential to significantly increase RWAs include the revision of the Basel III regime and initiatives with regard to risk identification (e.g. the amendment of the credit risk standard approach (CRSA), and the TRIM

process). In the area of financial reporting according to IFRS, particularly the proposed amendments to the rules on macro hedge accounting and distinction of equity and debt instruments could become relevant for pbb Group.

### IT Security

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

### Human Resources

As a listed company, pbb was able to increase its attractiveness as an employer. pbb is in a good position to recruit and retain very well-qualified employees and executives who can significantly participate in achieving the ambitious targets of pbb Group. An range of trainings and personnel development possibilities, as well as systematic health management, round off the offer. Nevertheless, risks from employee losses and the associated loss of knowledge cannot be fully excluded. In addition, winning new employees will likely become increasingly difficult, especially against the background of high demand for banking sector specialists in the midst of continuing demographic change. To confront this situation, pbb Group is developing innovative instruments for employee recruitment, which could burden development in earnings in the short term – but which in the long term should secure pbb Group's success.

### Legal Issues

pbb Group has recognised an appropriate level of provisions for legal risks. It is however possible that legal proceedings yield different results than expected by pbb Group. Thus, an outflow of resources can deviate positively or negatively from the recognised provisions. Depending on the deviation, this may result in opportunities or risks for the development in earnings, inter alia, for the following matters:

- > External tax audits by fiscal authorities may result in additional taxable income, and thus in higher tax expenses for previous periods. Despite the fact that pbb Group recognised an appropriate level of provisions for such risks, it cannot be ruled out that said provisions may not suffice, and that the future development in earnings is negatively affected. On the other hand, better than expected audit results would lead to a reversal of provisions, and thus be beneficial for the development in earnings.
- > pbb, the legal successor of Hypo Real Estate Bank International AG, Stuttgart, is the issuer of credit linked notes of the "Estate UK-3" synthetic securitisation transaction ("Credit Linked Notes"). These Credit Linked Notes hedge the default risk from certain credit exposures of pbb, provided that the conditions for the allocation of realised losses have been fulfilled in accordance with the terms of the Credit Linked Notes. A default affecting one of the hedged exposures ("Reference Claim No. 3") has caused a loss of approximately GBP 113 million; pbb intends to allocate this loss to the Credit Linked Notes. This loss allocation would trigger a total loss for Credit Linked Notes Classes A2, B, C, D and E, and would reduce the nominal amount of Class A1+ (of GBP 400,000) by approximately 0.1%. On 13 December 2016, Deloitte GmbH Wirtschaftsprüfungsgesellschaft, in its capacity as trustee of the ESTATE UK-3 transaction, notified pbb that in their view doubts exist as to whether the loss allocation intended by pbb is justified, and that the Trustee will appoint an Expert, in accordance with the terms of the ESTATE UK-3 transaction, who will decide on whether the loss allocation is in fact justified. In the event of the loss allocation being fully or partially unjustified, pbb would have to bear the losses to that extent. This would result in adverse effects on future development in assets, financial position and earnings. In June 2017, the Expert was appointed by the Trustee; the corresponding review process is currently ongoing. In pbb's opinion, the conditions for the planned allocation of losses have been met.

## **Brexit**

Since the United Kingdom's Brexit vote, pbb Group has been intensely focusing on this topic. The Bank is continuously analysing the consequences and risks arising as a result of Brexit for pbb Group and its business model and strategy. pbb is assessing the macro-economic development of the United Kingdom and the corresponding impact on real estate markets. Another core element of the analysis examines the question as to whether, and if so, which new regulatory requirements pbb's branch office in London will have to adhere to with the British supervisory authorities PRA and FCA, in order to be able to continue operating in the United Kingdom after Brexit takes place in 2019. On this basis, pbb strives to apply for a temporary authorisation according to the temporary permissions regime of FCA/PRA in the event of a 'hard' Brexit.

In addition to the above-mentioned internal analyses, the ECB as well as British banking supervisors have implemented a rule concerning reporting procedure for banks in preparation for Brexit. pbb has complied with the respective reporting obligations.

Given its current organisational and operational structure, pbb Group recognises no immediate need for action in the business model and in the adjustment of the business structure. Thanks to its specialist approach, pbb Group can, however, engineer a relatively speedy reaction to potential necessary amendments, and implement a business model adapted to new framework conditions in the United Kingdom.

From an economic perspective, the Brexit referendum has led to a period of ongoing uncertainty in the United Kingdom, combined with an increased likelihood of slowing economic demand. In the event that Brexit negotiations with the EU fail, the slowdown could become a recession, property values could fall, and the number of transactions in the commercial real estate market could drop significantly. In this case, these factors would increase the probabilities of default and impair market values in the existing portfolio. Therefore, pbb Group has reinforced monitoring of its portfolio in the United Kingdom.

However, to date pbb Group continues to believe that the British real estate market will remain attractive. The Bank thus continued to generate new business in the United Kingdom in 2018, albeit selecting this business more carefully. In 2019, new business development will depend on the extent to which it will remain eligible for inclusion in Pfandbrief cover even after Brexit. As of yet, a legal solution is still outstanding. In addition, new business will depend on the real estate market developments. The overall uncertainty should contribute to restrained demand. This applies in particular to the retail sector.

## **SUMMARY**

pbb Group is well-positioned for continued profitability, in an environment that features not only declining margins due to intensified competition, but also growing regulatory requirements. However, this assessment is based on the assumption that additional risks – arising from factors beyond pbb's control, for example – do not materialise. Giving due consideration to the opportunities and risks, pbb Group aims to generate a pre-tax profit of between €170 million and €190 million in 2019.

# Commentary on pbb's Unconsolidated Annual Financial Statements under HGB

## COURSE OF BUSINESS

In the 2018 financial year, pbb achieved profit before taxes of €186 million, as reported in its unconsolidated annual financial statements in accordance with the German Commercial Code (Handelsgesetzbuch, HGB). Compared to the previous year (2017: €277 million), profit before taxes declined considerably, although non-recurring effects were more prominent in the previous financial year than in the period under review. In 2017, this involved income from the termination and novation of derivatives as well as the prior year's distribution made by formerly affiliated companies. In 2018, risk provisioning was negatively affected by loan loss provisions on the financing of shopping centres in the United Kingdom and the further development of the method used to determine allowances.

The new business volume, as well as the financing volume of pbb, are in line with the information provided in pbb Group's report on economic position.

## DEVELOPMENT IN EARNINGS

### Development in earnings

in € million	2018	2017	Change
Net interest income	444	484	-40
Net fee and commission income	6	8	-2
Net other operating income	-11	18	-29
<b>Net operating income</b>	<b>439</b>	<b>510</b>	<b>-71</b>
General and administrative expenses	-215	-240	25
Personell expenses	-118	-122	4
Non-personell expenses	-97	-118	21
<b>Operating results (before loan loss provisions)</b>	<b>224</b>	<b>270</b>	<b>-46</b>
Risk provisioning	-37	9	-46
Net income from financial investments	8	-5	13
Additions to the fund for general banking risks	-	-	-
<b>Operating results</b>	<b>195</b>	<b>274</b>	<b>-79</b>
Extraordinary result	-9	3	-12
<b>Profit or loss before tax</b>	<b>186</b>	<b>277</b>	<b>-91</b>
Taxes	-35	-40	5
<b>Net income</b>	<b>151</b>	<b>237</b>	<b>-86</b>

### Net Operating Income

Net interest income declined from €484 million in 2017 to €444 million in 2018, primarily due to lower income from the termination and novation of derivatives (2018: €5 million; 2017: €38 million). The current net interest income was above the previous year's level. This was due to the increase in the average financing volume from commercial real estate financing arrangements as well as the lower refinancing portfolio and new borrowings of maturing liabilities at lower interest rates. As in the previous year, pbb profited from floors agreed upon with clients, given the negative interest rate environment. In the previous year, income of €22 million was generated in connection with a distribution made by formerly affiliated entities.

Net fee and commission income from non-accruable fees amounted to €6 million (2017: €8 million).

Net other operating income (€-11 million; 2017: €18 million) was primarily burdened by the bank levy (€-21 million; 2017: €-20 million). Various other factors, which particularly resulted in additions and reversals of provisions, translated into a slightly positive contribution. Overall, these non-recurring effects had a smaller positive effect on net other operating income/expenses than in the previous year.

#### **General and Administrative Expenses**

At €215 million, general and administrative expenses decreased year-on-year (2017: €240 million) due to lower personnel and non-personnel expenses. Personnel expenses declined to €118 million over the previous year (2017: €122 million), which was burdened by additions to provisions. Non-personnel expenses declined considerably, as a result of lower additions to provisions and reduced consulting expenses.

#### **Risk Provisioning**

Risk provisioning resulted in net expenses of €37 million during the year under review, compared to net income of €9 million in 2017. The main reasons for the increase in risk provisioning were loan loss provisions on the financing of shopping centres in the United Kingdom and the further development of the method used to determine allowances. Firstly, this further development referred to the methodology used for specific loan loss provisions; the individual cash flows are no longer determined using the most likely amounts, but rather on the basis of the values expected under various possible scenarios. Secondly, in the case of general loan loss provisions on exposures that were subject to a significant increase in default risk since the grant date, lifetime expected losses are now recorded as risk provisioning. The expenses were partially offset by income from the sale of the so-called Heta compensation claim for additional profits (Heta-Besserungsanspruch).

#### **Net Income from Financial Investments**

Net income from financial investments stood at €8 million (2017: €-5 million) and primarily included income from the reversal of general loan loss provisions for investment securities. In the previous year, net income from financial investments was negatively affected in particular by loss absorptions and write-downs of the carrying amounts of equity interests.

#### **Additions to the Fund for General Banking Risks**

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

#### **Extraordinary Result**

The extraordinary result in the amount of €-9 million (2017: €3 million) included additions to restructuring provisions in connection with the reorganisation of the business activities in Public Investment Finance and the centralisation of infrastructure tasks. In the previous year, the extraordinary result was slightly positive due to the reversal of restructuring provisions.

#### **Profit or Loss Before Tax**

In 2018, pbb's profit or loss before tax amounted to €186 million (2017: €277 million).

#### **Taxes**

The tax expenses amounted to €35 million (2017: €40 million), resulting from taxes on income.

#### **Net Income/Loss**

For 2018, pbb reports net income of €151 million (2017: €237 million).

## DEVELOPMENT IN ASSETS

### Development in assets

in € million	31.12.2018	31.12.2017	Changes
Cash reserve	1,388	999	389
Loans and advances to other banks	2,734	3,008	-274
Loans and advances to customers	39,260	38,310	950
Bonds and other fixed-income securities	9,558	10,454	-896
Equity shares and other variable-yield securities	2	2	-
Participating interests	-	-	-
Investments in affiliated companies	20	15	5
Assets held in trust	-	-	-
Intangible assets	10	8	2
Tangible assets	4	6	-2
Sundry assets	137	145	-8
Prepaid expenses	340	388	-48
Overfunded plan assets	-	6	-6
<b>Total assets</b>	<b>53,453</b>	<b>53,341</b>	<b>112</b>

### General Development in Assets

As at the balance sheet date, pbb's total assets stood at €53.3 billion, almost unchanged on the previous year. The increase in loans and advances to customers was offset by the decline in bonds and other fixed-income securities.

## DEVELOPMENT IN FINANCIAL POSITION

### Development in financial position

in € million	31.12.2018	31.12.2017	Changes
Liabilities to other banks	4,316	4,276	40
Liabilities to customers	22,425	23,581	-1,156
Securitised liabilities	22,092	20,836	1,256
Liabilities held in trust	-	-	-
Sundry liabilities	31	34	-3
Deferred income	568	619	-51
Provisions	305	310	-5
Subordinated liabilities	711	1,002	-291
Additional Tier 1 capital instruments	312	-	312
Fund for general banking risks	47	47	-
<b>Total liabilities</b>	<b>50,807</b>	<b>50,705</b>	<b>102</b>
Equity	2,646	2,636	10
<b>Total liabilities and equity</b>	<b>53,453</b>	<b>53,341</b>	<b>112</b>

## Liabilities

Liabilities amounted to €50.8 billion (31 December 2017: €50.7 billion). While liabilities to customers declined by €1.2 billion, among other things due to maturing promissory note loans, securitised liabilities increased by €1.3 billion due to Pfandbrief issues.

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

## Equity

### Equity

in € million	31.12.2018	31.12.2017	Changes
Share capital	380	380	–
Additional paid-in capital	1,639	1,639	–
Retained earnings	493	473	20
Unappropriated retained earnings	134	144	–10
<b>Equity</b>	<b>2,646</b>	<b>2,636</b>	<b>10</b>

For both of the financial years 2018 and 2017, pbb's share capital amounted to €380,376,059.67, consisting of 134,475,308 registered ordinary bearer shares in the form of no-par value shares with a notional interest in the share capital of €2.83 per share. The additional paid-in capital remained unchanged. Net additions of €20 million (2017: €97 million) were made to retained earnings during the year under review. Unappropriated retained earnings in the amount of €134 million (31 December 2017: €144 million) comprised net income of €151 million (2017: €237 million), net additions to retained earnings in the amount of €–20 million (2017: €–97 million) and the withdrawal from profit-participation certificates in the amount of €3 million (2017: €4 million).

## Key Regulatory Capital Ratios

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



# Supplemental Information

## DISCLOSURES PURSUANT TO SECTION 315A (1) OF THE GERMAN COMMERCIAL CODE (HGB)<sup>1</sup>

### Composition of Subscribed Capital (Section 315a (1) No. 1 HGB)

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

### Restrictions Affecting the Voting Rights or the Transfer of Shares (Section 315a (1) No. 2 HGB)

With respect to the exercise and transfer of voting rights of shares only the statutory provisions apply. The voting rights are not limited by size. All shareholders who register for participation in the Annual General Meeting in time and who have demonstrated their right to participate in the Annual General Meeting and to exercise their voting rights may exercise the voting rights attached to all the shares held and registered by them. Where pbb holds treasury shares, section 71b of the German Stock Corporation Act (Aktiengesetz, AktG) prohibits the exercise of rights vested in such shares.

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

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

### Shareholdings Exceeding 10% of Voting Rights (Section 315a (1) No. 3 HGB)

According to the knowledge of pbb no shareholder held at least 10% interest in the pbb as of 31 December 2018.

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

<sup>1</sup> pbb Group's Supplemental Information according to section 315a (1) HGB is equal to pbb's Supplemental Information according to section 289a (1) HGB.

### Shares with Special Rights Conferring Powers of Control (Section 315a (1) No. 4 HGB)

No shares carrying special rights, which would permit the holder to exercise control, were issued.

### Type of Control of Voting Rights Regarding Shares Held by Employees with their Rights of Control not Being Directly Exercised (Section 315a (1) No. 5 HGB)

Employees holding pbb shares exercise their rights, like all other shareholders, according to statutory provisions and the Articles of Association.

### Statutory Provisions, and Provisions in the Articles of Association Regarding the Appointment and Removal of Members of the Management Board, and Regarding Amendments to the Articles of Association (Section 315a (1) No. 6 HGB)

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

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

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

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

#### Authorised Capital

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

### Conditional Capital

Pursuant to the resolution of the Annual General Meeting dated 10 June 2015, the share capital of pbb shall be conditionally increased by up to €190,188,029.83 through the issuance of up to 67,237,653 new ordinary bearer shares with no par value (Conditional Capital 2015). The conditional capital increase can only be carried out to the extent to which the conversion or option rights of the holders or creditors of convertible bonds, convertible profit participation rights, convertible hybrid bonds or warrants attached to warrant bonds or profit-sharing certificates with warrants, which are issued or guaranteed by pbb or group entities (section 18 (1) of the AktG) subordinated to pbb in accordance with the authorisation resolution of the Annual General Meeting dated 10 June 2015 (Authorisation 2015) before 9 June 2020, are exercised, or holders or creditors with an obligation to convert fulfil their obligations to convert, or pbb uses its right to substitute, and other forms of performance in satisfaction thereof are not chosen. The new shares are to be issued at the option and/or conversion prices calculated in each case in accordance with the Authorisation 2015. The new shares shall be entitled to a dividend from the beginning of the financial year in which they are created, by exercise of conversion and/or option rights or by fulfilment of respective obligations to convert or by use of pbb's right to substitute; to the extent legally permissible, the Management Board shall be authorised, with the consent of the Supervisory Board, to assign the profit participation of the new shares in derogation from section 60 (2) of the AktG, also for a financial year which has already expired.

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

### Convertible Bonds, Warrant Bonds, Profit Participation Rights and Hybrid Bonds

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

### Treasury Shares

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

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

As at 31 December 2018, pbb neither held treasury shares nor equity derivatives.

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

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

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

Please refer to the remuneration report for further information on compensation agreements entered into with members of the Management Board or employees in the event of a takeover offer.

## CORPORATE GOVERNANCE STATEMENT AND CORPORATE GOVERNANCE REPORT<sup>1</sup>

### Declaration of Compliance with the German Corporate Governance Code, pursuant to section 161 of the AktG

Since 16 July 2015, pbb shares have been listed on the Frankfurt Stock Exchange. Since that date, pbb has been subject to disclosure requirements pursuant to section 161 of the AktG. Its first-time Declaration of Compliance with the German Corporate Governance Code (the "Code") dated 14 August 2015, as well as all subsequent Declarations of Compliance, are available on the company's website: <https://www.pfandbriefbank.com/en/investors/mandatory-publications.html>. The most recent Declaration of Compliance issued by the Management Board and the Supervisory Board was dated 15 February 2019.

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

Accordingly, the Management Board and the Supervisory Board of pbb declare that pbb complied with the recommendations of the Government Commission "German Corporate Governance Code" (as amended on 7 February 2017) during the 2018 financial year, and continues to do so.

Munich, 15 February 2019

The Management Board    The Supervisory Board

<sup>1</sup> The chapter "Corporate Governance Statement and Corporate Governance Report" has not been part of the audit carried out by the external auditors.

## Corporate Governance Report

pbb is a leading European specialist bank for commercial real estate finance; it ranks amongst the largest issuers of Pfandbriefe. pbb has been listed in the Prime Standard segment of the Regulated Market at the Frankfurt Stock Exchange since 16 July 2015; its shares have been included in the MDAX® index since 21 September 2015. pbb holds a General Meeting of shareholders at least once a year.

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

### Recommendations of the German Corporate Governance Code

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

### Description of Management Board and Supervisory Board work processes

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

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

### Management Board

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

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

- > Andreas Arndt, CEO and CFO
- > Thomas Köntgen, Deputy CEO, Real Estate Finance and Treasury
- > Andreas Schenk, CRO

Effective 1 January 2019, Marcus Schulte was appointed as additional Management Board member.

Members of the Management Board are bound to act in the interests of pbb; they must not pursue personal interests in their decision-making. During their term of office for pbb, they are bound to observe an extensive no-competition clause and are prohibited from exploiting opportunities available to the Company for their own benefit. Members of the Management Board must draw their fellow Board members' attention to potential conflicts of interest; they are obliged to disclose any actual conflicts of interest to the Supervisory Board (or the Executive and Nomination Committee of the Supervisory Board), without delay. No such conflicts of interest occurred during the year under review.

pbb does not grant any loans to Management Board members.

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

### Supervisory Board

The Supervisory Board continuously monitors the Management Board, providing it with regular advice on the management of the Company. In accordance with the Memorandum and Articles of Association, the Supervisory Board consists of nine members, six of which are elected by shareholders and three by employees, in accordance with the German One-Third Employee Participation Act (Drittelbeteiligungsgesetz). The current terms of office of shareholder representatives on the Supervisory Board will end upon the close of the Annual General Meeting in 2021, which resolves on the formal approval for the 2020 financial year. The next regular elections of employee representatives to the Supervisory Board are scheduled to take place in 2021.

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

During the financial year 2018, the company's Supervisory Board comprised:

### Supervisory Board of pbb in financial year 2018

Name and place of residence Function in Supervisory Board	Principal occupation Functions in the Committees of the Supervisory Board	Supervisory Board memberships and other directorships in 2018
<b>Dr Günther Bräunig</b> Frankfurt/Main, Germany Chairman	<b>CEO of KfW</b> Chairman of the Executive and Nomination Committee and of the Remuneration Committee, Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee (until 21.6.2018)	<b>True Sale International GmbH, Frankfurt/Main, Germany</b> – Chairman of the Shareholder's Advisory Board (until 30.4.2018) <b>Deutsche Post AG, Bonn</b> – Member of the Supervisory Board (since 17.3.2018) <b>Deutsche Telekom AG, Bonn</b> – Member of the Supervisory Board (since 21.3.2018)
<b>Dagmar Kollmann</b> Vienna, Austria Deputy Chairman	<b>Entrepreneur</b> Chairman of the Audit Committee, Member of the Executive and Nomination Committee and of the Remuneration Committee and of the Risk Management and Liquidity Strategy Committee (since 21.6.2018)	<b>Deutsche Telekom AG, Bonn, Germany</b> – Member of the Supervisory Board <b>KfW IPEX-Bank GmbH, Frankfurt/Main, Germany</b> – Member of the Supervisory Board <b>Bank Gutmann AG, Vienna, Austria</b> – Member of the Supervisory Board <b>Unibail-Rodamco SE, Paris, France</b> – Member of the Supervisory Board
<b>Dr Jutta Dönges</b> Frankfurt/Main, Germany Member (since 21.6.2018)	<b>Executive Board Member of Bundesrepublik Deutschland – Finanzagentur GmbH</b> Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee (since 21.6.2018)	<b>FMS Wertmanagement AöR, Munich, Germany</b> – Deputy Chairman of the Supervisory Board <b>Erste Abwicklungsanstalt AöR, Düsseldorf, Germany</b> – Member of the Supervisory Board <b>Eurex Clearing AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board (since 27.6.2018)
<b>Dr Thomas Duhnkrack</b> Kronberg/Taunus, Germany Member	<b>Entrepreneur</b> Member of the Audit Committee	<b>Hauck &amp; Aufhäuser Privatbankiers AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board
<b>Dr Christian Gebauer-Rochholz</b> Hochheim, Germany Employee Representative	<b>Bank employee</b>	–
<b>Georg Kordick</b> Poing, Germany Employee Representative	<b>Bank employee</b>	–
<b>Joachim Plesser</b> Ratingen, Germany Member	<b>Consultant</b> Chairman of the Risk Management and Liquidity Strategy Committee, Member of the Executive and Nomination Committee and of the Remuneration Committee	<b>Commerz Real Investmentgesellschaft mbH, Wiesbaden, Germany</b> – Member of the Supervisory Board <b>DIC Beteiligungs AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board <b>GEG German Estate Group AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board <b>Pandion AG, Cologne, Germany</b> – Chairman of the Supervisory Board
<b>Oliver Puhl</b> Frankfurt/Main, Germany Member	<b>Entrepreneur</b> Member of the Risk Management and Liquidity Strategy Committee	–
<b>Heike Theißing</b> Munich, Germany Employee Representative	<b>Bank employee</b> Member of the Remuneration Committee	–
<b>Dr Hedda von Wedel</b> Andernach, Germany Member (until 21.6.2018)	<b>President of the Bundesrechnungshof (retired)</b> Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee (until 21.6.2018)	–

In accordance with section 5.4.1 of the Code, as part of its Rules of Procedure, the Supervisory Board has defined specific goals for its composition; in 2017, it resolved upon a profile of skills and expertise for the entire Board. In addition to these objectives, the Supervisory Board has introduced a catalogue of criteria for new Supervisory Board members, which takes into account Company-specific and professional requirements. The Supervisory Board considered these provisions in its proposal to the Annual General Meeting 2018 for electing Dr Jutta Dönges as shareholder representative on the Supervisory Board. Furthermore, the Supervisory Board adopted a guideline on the hiring process and suitability check for Management and Supervisory Board members as well as for key personnel in 2018 (Suitability Policy); this Policy summarises and further specifies the previous rules, e.g. regarding the ongoing evaluation of individual and collective suitability. A guideline on fostering diversity in the Management Board and Supervisory Board supplements the Suitability Policy.



As a general rule, the Supervisory Board should consist of independent members, in a number that the Supervisory Board considers sufficient. The Supervisory Board should also not include more than two former members of the Management Board. Former Management Board members should not chair the Supervisory Board, or one of its committees. With the exception of Dr Jutta Dönges and Oliver Puhl, all shareholder representatives on the Supervisory Board were appointed at a point in time when pbb was wholly owned by Hypo Real Estate Holding GmbH, and thus indirectly by the German Financial Markets Stabilisation Agency (FMSA) and the Federal Republic of Germany. However, all Supervisory Board members, with the exception of Dr Günther Bräunig and Dr Jutta Dönges, consider themselves independent. No former member of the Management Board currently sits on the Supervisory Board.

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

The committees consist of the following members:

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

The members of the **Audit Committee** are:  
Dagmar Kollmann (Chairman), Dr Günther Bräunig, Dr Jutta Dönges (since 21.6.2018),  
Dr Thomas Duhnkrack and Dr Hedda von Wedel (until 21.6.2018).

The members of the **Risk Management and Liquidity Strategy Committee** are:  
Joachim Plesser (Chairman), Dr Günther Bräunig (until 21.6.2018), Dr Jutta Dönges (since 21.6.2018),  
Dagmar Kollmann (since 21.6.2018), Oliver Puhl and Dr Hedda von Wedel (until 21.6.2018).

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

The Executive and Nomination Committee concerns itself with strategic and current issues affecting the Group, as well as with matters concerning the Management Board, for which it prepares corresponding proposals for the plenary meeting. It also advises the Supervisory Board regarding issues of Management Board personnel and succession planning, the individual specifications of Management Board contracts, and submits corresponding recommendations to the Supervisory Board. In addition, the committee prepares the examination of efficiency for the Management Board as well as the Supervisory Board and its committees. Moreover, it deals with the implementation of the female quota for pbb's Supervisory Board and Management Board, and makes proposals for the succession of Supervisory Board members to be elected by shareholders.

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

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

The Remuneration Committee monitors whether remuneration systems for the Management Board and for the bank's employees are appropriate; it deals with the remuneration report, the agreement of targets for Management Board members, and for examining and determining staff having risk-taking functions.

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

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

The members of the Supervisory Board generally take responsibility for undertaking any training or professional development measures necessary to fulfil their duties. The Company adequately supports them in this regard. Since the second half of 2018, regular training for Supervisory Board and Management Board members is also provided ahead of the ordinary Supervisory Board meetings through presentations by external and internal speakers. This regular training programme for the entire Supervisory Board will be continued.

Due to offices they hold with other credit institutions and real estate investors, some of the Supervisory Board members may conceivably have conflicts of interest which require disclosure to the Supervisory Board, particularly regarding conflicts of interest which may arise due to a consultant or directorship function with clients, suppliers, lenders or other parties. In case of existing conflicts of interests of Supervisory Board members or their related parties, in particular stemming from relationships with clients and/or relationships with other credit institutions, the Supervisory Board's Rules of Procedure provide regulations to avoid or mitigate such conflicts of interest, for instance the disclosure of imminent conflicts of interest or the waiver of voting rights.

pbb does not grant any loans to Supervisory Board members.

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

During the financial year under review, the Supervisory Board examined the efficiency of its work in line with the requirements of section 25d (11) of the KWG, drawing on external support for this purpose. At the Supervisory Board meeting held on 15 February 2019, the results of the Supervisory Board and Management Board evaluations for 2018 were discussed, and recommendations were derived.

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

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

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

### **Other Disclosures Regarding Corporate Governance Standards**

#### **Transparency**

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

#### **Risk Management**

Risk management and risk control are key tasks within the scope of pbb's overall bank management. Through the business and risk strategy, the Management Board sets the framework for pbb's risk appetite and risk-bearing capacity in its business activities. Monthly risk reports to the Management Board provide an extensive analysis of pbb's overall risk situation and adjustments are made where necessary. The Supervisory Board is informed about the risk situation on a regular basis, at least once a quarter.

### Compliance

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

### Remuneration Report

As part of pbb's Annual Report, the Remuneration Report outlines the structure of remuneration systems for the Supervisory Board, the Management Board, and employees. This includes a description of Supervisory Board remuneration, in accordance with the Memorandum and Articles of Association; remuneration for the Management Board is broken down into monetary remuneration, ancillary benefits, and pension benefits, and is shown individually for each Management Board member. For details on share option programmes or other share-based incentive systems of the Company, please refer to pbb's Remuneration Report. The 2018 quantitative remuneration information on employees, to be disclosed in compliance with Article 450 of the Capital Requirements Regulation ("CRR") in conjunction with section 16 of the German Regulation on Remuneration in Financial Institutions (Institutsvergütungsverordnung – "IVV"), is scheduled to be disclosed after completion of the remuneration review during the second quarter of 2019, in line with the IVV, as part of pbb's remuneration report, which is permanently available on the Company's website (<http://www.pfandbriefbank.com>).

### Related Party Transactions

Please refer to the notes to the Consolidated Financial Statements for further information regarding related party transactions.

### Accounting policies

pbb prepares its annual financial statements in accordance with the provisions of the German Commercial Code (Handelsgesetzbuch – "HGB"); its consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS), as adopted in the European Union. The Management Board prepares the annual and consolidated financial statements. The external auditors submit their report on the audit of the annual financial statements and consolidated financial statements to the Supervisory Board. The Annual General Meeting appointed KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG) as the external auditors for the 2018 financial year. Having ascertained the independence of the external auditors, the Supervisory Board appointed the external auditors and defined the focal points of the audit. Details regarding the fees paid to the external auditors are provided in the notes to the consolidated financial statements.

KPMG, the auditors of the annual and consolidated financial statements elected by the Annual General Meeting, audited the Annual Financial Statements and Consolidated Financial Statements as well as the Combined Management Report of pbb as at 31 December 2018, and issued them with an unqualified audit opinion. The Non-Financial Statement, which pbb is required to submit as part of the Management Report pursuant to sections 315b and 289b of the HGB, was published in a separate Non-Financial Report included in the present Annual Report. In the context of its audit obligation as per section 171 (1) of the German Stock Corporation Act (AktG), the Supervisory Board made use of the possibility of a content-related external audit of the non-financial statement according to section 111 (2) sentence 4 of the AktG, carried out by KPMG in the course of a separate appointment. KPMG has submitted a declaration of its independence to the Supervisory Board.

All Supervisory Board members received the financial statements documents and audit reports in good time. The Audit Committee addressed the financial statements documents in its meeting on 21 March 2019. The Annual Financial Statements and Consolidated Financial Statements, the Combined Management Report as well as audit reports were discussed in detail with the Management Board and representatives of the external auditors. Following its own review, the Supervisory Board did not raise any objections to the audit results submitted by the external auditors. In the accounts review meeting held on 21 March 2018, it approved the Consolidated Financial Statements prepared by the Management Board, and the Annual Financial Statements were adopted. Details regarding the examinations carried out by the Supervisory Board, and the results of such examinations, are provided in the Report of the Supervisory Board.

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

In its Code of Conduct (which is also published on pbb's website), pbb Group has committed itself to respect all people, independent of age, sex, race, social background, skills, sexual orientation or religion. The Group welcomes and fosters diversity amongst its staff and management bodies – this includes safeguarding the principle of equal opportunity, whilst rejecting discrimination of any kind. Since 2010, pbb has been a signatory to the Diversity Charter, thus demonstrating its fundamental commitment to the economic benefits of diversity, tolerance and fairness among a company's employees as well as among its customers and business partners. Diversity with regard to age, sex, educational and professional background is an important requisite for pbb Group's competitiveness and sustainable business success.

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

In principle, every candidate must be reliable and sufficiently qualified; he or she must be able to ensure sufficient availability to exercise his or her office. Besides holding the necessary professional skills with regard to management and sector experience, candidates shall be trustworthy and of high integrity. Likewise, the selection of candidates shall take their requisite independence into account. Where several candidates are being considered, the goal of achieving maximum diversity shall also be considered. Moreover, the composition of executive bodies is supposed to reflect pbb Group's international activities as well as the structure of the workforce.

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

As a rule, the members of the Supervisory Board should not be older than 70 years, and the term of office of a Supervisory Board member should generally end upon the close of the ordinary Annual General Meeting following their reaching the age of 70. As a rule, members of the Supervisory Board should not serve for more than three full terms of office (as defined by section 102 (1) of the AktG). In principle, pbb currently complies with these rules, except for one case where the term of

office will end later than upon the close of the ordinary Annual General Meeting following the member reaching the age of 70 (Joachim Plesser, whose term of office will end upon the close of the Annual General Meeting 2021, which will resolve on formal approval for the 2020 financial year).

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

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

As at 31 December 2018, the quota of women within the Supervisory Board remained unchanged compared to the previous year's reporting date (33.3%). After Dr Hedda von Wedel retired from the Supervisory Board, Dr Jutta Dönges was appointed as shareholder representative on the Supervisory Board. The female quota of the Management Board, whose composition was unchanged as at 31 December 2018 compared to the previous year's reporting date, remained at 0%. The Supervisory Board maintains its endeavours to ensure the respective under-represented gender is appropriately represented when filling vacancies on the Management Board, in a targeted manner – given candidates who have the requisite skills and qualifications. However, in view of the terms of Management Board members' service contracts (which run at least until 2020), and considering the appointment of Marcus Schulte to the Management Board on 1 January 2019 after the two-year introduction phase, any change in the present situation is not expected soon.

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

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

As during the reporting period 2017, the female quotas for the first and second management levels below the Management Board increased again, even though the targets were not yet achieved against the background of a stable workforce and low fluctuation in pbb's staff. As at 31 December 2018, the female quotas for the first and second management levels below the Management Board amounted to 13.6% and 12.7%, respectively. pbb maintains its intention to raise the number of women in executive positions, and to ensure women are appropriately represented when filling vacancies, in a targeted manner – given candidates who have the requisite skills and qualifications. A higher awareness for this topic, across all levels of hierarchy, together with a corresponding management and corporate culture, contribute to this objective. Moreover, pbb offers employees attractive working conditions – especially flexible working hours and teleworking opportunities, which help balancing family and working life. In 2019, pbb Group will introduce new, practical and day-to-day supporting measures, aimed at continuing to promote the compatibility of family and working life. Please refer to the Non-Financial Statement for further details.

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

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

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# Income Statement

## Income statement<sup>1)</sup>

in € million	Note	2018	2017
Net interest income	34	450 <sup>2)</sup>	407
Net fee and commission income	35	6	8
Net income from financial instruments at fair value through profit or loss (net income from fair value measurement) <sup>3)</sup>	36	-9	-5
Net income from derecognition of financial instruments not measured at fair value through profit or loss (net income from realisations) <sup>3)</sup>	37	32	45
Thereof: from financial assets at amortised cost		31	43
Net income from hedge accounting	38	-1	-1
Net other operating income	39	-7	-1
Net income from allowances for credit losses on financial assets (net income from risk provisioning) <sup>3)</sup>	40	-14	-10
General and administrative expenses	41	-193	-199
Expenses from bank levies and similar dues	42	-25	-28
Net income from write-downs and write-ups of non-financial assets	43	-15	-14
Net income from restructuring	44	-9	2
<b>Profit or loss before tax</b>		<b>215</b>	<b>204</b>
Income tax	45	-36	-22
<b>Net income/loss</b>		<b>179</b>	<b>182</b>
attributable to: Shareholders		179	182

<sup>1)</sup> Disclosure structure of the income statement adjusted due to IAS 8.14. Details are disclosed in note "Consistency".

<sup>2)</sup> Interest income of €1,834 million in total includes interest income of €1,310 million from financial instruments not measured at fair value through profit or loss (IAS 1.82a).

<sup>3)</sup> Solely the condensed and parenthesised line item descriptions are used subsequently.

## Earnings per share

in €	Note	2018	2017
Basic earnings per share	47	1.24	1.35
Diluted earnings per share	47	1.24	1.35



# Statement of Comprehensive Income

## Statement of comprehensive income

in € million	2018	2017
<b>Net income/loss</b>	<b>179</b>	<b>182</b>
Accumulated other comprehensive income	-43	3
Items that will not be reclassified to profit or loss, net of tax	2	7
Gains/losses on pension commitments, before tax	3	10
Income tax relating to items that will not be reclassified to profit or loss	-1	-3
Items that may be reclassified to profit or loss, net of tax	-45	-4
Gains/losses on translating foreign currency, before tax	-	1
unrealised gains/losses	-	-
gains/losses reclassified to profit or loss	-	1
Gains/losses on cash flow hedge accounting, before tax	-31	-30
unrealised gains/losses	-	-
gains/losses reclassified to profit or loss	-31	-30
Gains/losses on financial assets at fair value through other comprehensive income, before tax	-31	23
unrealised gains/losses	-31	19
gains/losses reclassified to profit or loss	-	4
Income tax relating to items that may be reclassified to profit or loss	17	2
<b>Comprehensive income for the period</b>	<b>136</b>	<b>185</b>
attributable to:		
Shareholders	136	185

# Statement of Financial Position

## Assets<sup>1)</sup>

in € million	Note	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)	1.1.2017 (IAS 39)
Cash reserve	9, 48	1,388	999	999	1,136
Financial assets at fair value through profit or loss	10, 49	1,659	1,735	870	1,089
Positive fair values of stand-alone derivatives		749	870	870	1,089
Debt securities		258	333	–	–
Loans and advances to customers		649	529	–	–
Shares in investment funds qualified as debt instruments		3	3	–	–
Financial assets at fair value through other comprehensive income	11, 50	1,984	2,182	2,385	3,311
Debt securities		1,564	1,735	2,382	3,308
Loans and advances to other banks		16	17	–	–
Loans and advances to customers		404	430	–	–
Shares in investment funds qualified as debt instruments		–	–	3	3
Financial assets at amortised cost after credit loss allowances	12, 51	50,341	50,323	50,858	53,391
Financial assets at amortised cost before credit loss allowances		50,453	50,427	50,942	53,531
Debt securities		8,039	8,667	8,253	9,544
Loans and advances to other banks		2,231	2,400	2,415	2,841
Loans and advances to customers		40,183	39,360	40,274	41,146
Credit loss allowances on financial assets at amortised cost		–112	–104	–84	–140
Positive fair values of hedge accounting derivatives	13, 52	2,207	2,678	2,678	3,492
Valuation adjustment from portfolio hedge accounting (assets)	14, 53	2	–1	–1	2
Tangible assets	15, 54	4	6	6	8
Intangible assets	16, 55	37	36	36	24
Other assets	17	35	34	34	80
Current income tax assets	27	26	42	42	47
Deferred income tax assets	27	86	71	87	71
<b>Total assets</b>		<b>57,769</b>	<b>58,105</b>	<b>57,994</b>	<b>62,651</b>

<sup>1)</sup> Adjusted structure type of assets due to IAS 8.14. Details are disclosed in note "Consistency".

## Liabilities and Equity<sup>1)</sup>

in € million	Note	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)	1.1.2017 (IAS 39)
Financial liabilities at fair value through profit or loss	18, 58	881	1,040	956	1,355
Negative fair values of stand-alone derivatives		881	1,040	956	1,355
Financial liabilities measured at amortised cost	19, 59	50,714	50,919	50,919	54,395
Liabilities to other banks		3,867	3,797	3,797	3,779
Liabilities to customers		24,901	26,244	26,244	28,978
Bearer bonds		21,237	19,876	19,876	20,752
Subordinated liabilities		709	1,002	1,002	886
Negative fair values of hedge accounting derivatives	20, 60	2,538	2,805	2,889	3,719
Valuation adjustment from portfolio hedge accounting (liabilities)	21, 61	23	–	–	1
Provisions	22, 62	268	247	245	242
Other liabilities	23	40	70	70	66
Current income tax liabilities	27	48	57	57	59
<b>Liabilities</b>		<b>54,512</b>	<b>55,138</b>	<b>55,136</b>	<b>59,837</b>
Equity attributable to the shareholders of pbb	24, 64	2,959	2,967	2,858	2,814
Subscribed capital		380	380	380	380
Additional paid-in capital		1,637	1,637	1,637	1,637
Retained earnings		760	722	731	674
Consolidated profit		179	182	182	197
Accumulated other comprehensive income		3	46	–72	–74
Thereof: allowances for credit losses on financial assets at fair value through other comprehensive income		1	1	–	–
Additional equity instruments (AT1 capital)		298	–	–	–
<b>Equity</b>		<b>3,257</b>	<b>2,967</b>	<b>2,858</b>	<b>2,814</b>
<b>Total liabilities and equity</b>		<b>57,769</b>	<b>58,105</b>	<b>57,994</b>	<b>62,651</b>

<sup>1)</sup> Adjusted structure type of equity and liabilities due to IAS 8.14. Details are disclosed in note "Consistency".

# Statement of Changes in Equity

## Statement of changes in equity

in € million	Equity attributable to the shareholders								Equity
	Accumulated other comprehensive income (OCI) from:							Additional equity instruments (AT1 capital)	
	Subscribed capital	Additional paid-in capital	Retained earnings	Consolidated profit	Pension commitments	Cash flow hedge accounting	Financial assets at fair value through OCI (IAS 39: AfS reserve)		
<b>Balance at 1.1.2017</b>	<b>380</b>	<b>1,637</b>	<b>674</b>	<b>197</b>	<b>-82</b>	<b>44</b>	<b>-36</b>	<b>-</b>	<b>2,814</b>
Distribution	-	-	-	-141	-	-	-	-	-141
Comprehensive income for the period	-	-	1	182	7	-22	17	-	185
Net income/loss	-	-	-	182	-	-	-	-	182
OCI for the period, after taxes	-	-	1	-	7	-22	17	-	3
Transfer to retained earnings	-	-	56	-56	-	-	-	-	-
<b>Balance at 31.12.2017</b>	<b>380</b>	<b>1,637</b>	<b>731</b>	<b>182</b>	<b>-75</b>	<b>22</b>	<b>-19</b>	<b>-</b>	<b>2,858</b>
Effects from initial adoption of IFRS 9	-	-	-9	-	-	-	118	-	109
<b>Balance at 1.1.2018</b>	<b>380</b>	<b>1,637</b>	<b>722</b>	<b>182</b>	<b>-75</b>	<b>22</b>	<b>99</b>	<b>-</b>	<b>2,967</b>
Capital increase	-	-	-	-	-	-	-	300	300
Transaction costs	-	-	-	-	-	-	-	-2	-2
Distribution	-	-	-	-144	-	-	-	-	-144
Comprehensive income for the period	-	-	-	179	2	-22	-23	-	136
Net income/loss	-	-	-	179	-	-	-	-	179
OCI for the period, after taxes	-	-	-	-	2	-22	-23	-	-43
Transfer to retained earnings	-	-	38	-38	-	-	-	-	-
<b>Balance at 31.12.2018</b>	<b>380</b>	<b>1,637</b>	<b>760</b>	<b>179</b>	<b>-73</b>	<b>-</b>	<b>76</b>	<b>298</b>	<b>3,257</b>

# Statement of Cash Flows

## Statement of cash flows<sup>1)</sup>

in € million	2018	2017
<b>Net income/loss</b>	<b>179</b>	<b>182</b>
Write-downs and depreciation on tangible and intangible assets	15	14
Write-downs, provisions for losses on, and write-ups of, financial assets at amortised cost	8	7
Result from the disposal of financial securities at amortised cost	–	–
Result from the disposal of financial securities at fair value through other comprehensive income	1	–1
Change in other non-cash positions	139	137
Other adjustments	–414	–384
<b>Subtotal</b>	<b>–72</b>	<b>–45</b>
Change in assets and liabilities from operating activities after correction of non-cash components		
Increase in assets/decrease in liabilities (–)		
Decrease in assets/increase in liabilities (+)		
Financial instruments at fair value through profit or loss and positive/negative fair values of hedge accounting derivatives	–167	14
Financial assets at fair value through other comprehensive income	8	–
Financial instruments at amortised cost (without payments in/of subordinated capital)	–298	–1,967
Other assets from operating activities	–	–126
Other liabilities from operating activities	–106	–106
Interest income received	2,120	1,731
Interest expense paid	–1,702	–1,335
Taxes on income paid/refund	–28	–35
<b>Cash flow from operating activities</b>	<b>–245</b>	<b>–1,869</b>
Proceeds from the sale of securities	775	2,582
Payments for the acquisition of securities	–	–815
Payments for the acquisition of tangible and intangible assets	–14	–20
<b>Cash flow from investing activities</b>	<b>761</b>	<b>1,747</b>
Proceeds from additional equity instruments (AT1)	298	–
Disbursement of dividends	–144	–141
Payments in/of subordinated liabilities	–281	126
<b>Cash flow from financing activities</b>	<b>–127</b>	<b>–15</b>
Cash and cash equivalents at the end of the previous period	999	1,136
+/- Cash flow from operating activities	–245	–1,869
+/- Cash flow from investing activities	761	1,747
+/- Cash flow from financing activities	–127	–15
+/- Effects of exchange rate changes	–	–
<b>Cash and cash equivalents at the end of the period</b>	<b>1,388</b>	<b>999</b>

<sup>1)</sup> Explanations in Note "Notes to the Items in the Consolidated Statement of Cash Flows".

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## 1 General Information

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

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

The Management Board of pbb prepared and authorised for these Consolidated Financial Statements for issue on 26 February 2019.

## ACCOUNTING POLICIES

### 2 Principles

pbb has prepared the present Consolidated Financial Statements for the period ending 31 December 2018 in line with EC ordinance No. 1606/2002 of the European Parliament and Council of 19 July 2002 in accordance with International Financial Reporting Standards (IFRS). The IFRS are standards and interpretations adopted by the International Accounting Standards Board (IASB). These are the International Financial Reporting Standards (IFRS), the International Accounting Standards (IAS) and the interpretations of the IFRS Interpretations Committee (formerly IFRIC) respectively the former Standing Interpretations Committee (SIC); they are also based on the regulations of commercial law which are applicable in accordance with Section 315e (1) HGB (German Commercial Code).

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

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

#### Initially Adopted IFRS, Interpretations and Amendments in 2018

pbb Group implemented all standards and interpretations which had to be applied mandatorily and which had been endorsed into European law. pbb Group initially applied the following new and amended IFRS and published IFRIC in the financial year 2018:

- > IFRS 9: Financial Instruments
- > IFRS 15: Revenue from Contracts with Customers und Clarifications to IFRS 15
- > IFRIC 22: Foreign Currency Transactions and Advance Consideration

- > Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions
- > Amendments to IFRS 4: Applying IFRS 9 Financial Instrument with IFRS 4 Insurance Contracts
- > Amendments to IAS 40: Transfers of Investment Properties
- > Annual Improvements to IFRS Standards 2014–2016 Cycle (Amendments to IFRS 1 and IAS 28)

**IFRS 9: Financial Instruments** As of 1 January 2018, pbb Group applied IFRS 9 (Financial Instruments) as endorsed by the European Union which superseded the former regulations of IAS 39. The standard contains mainly fundamental revisions regarding recognition and derecognition, classification, measurement and hedge accounting. IFRS 9 also led to significant amendments on IFRS 7 (Financial Instruments: Disclosures) due to which disclosures of information on financial instruments have been adapted to the new requirements.

The initial application of IFRS 9 was accounted for retrospectively as of 1 January 2018. However, in line with IFRS 9 the comparative figures for the prior year were not adjusted. Hence, the initial application effects are shown directly in equity not affecting profit or loss. According to the option pursuant to IFRS 9.7.2.21 Deutsche Pfandbriefbank Group (pbb Group) still applies the requirements of IAS 39 for hedge accounting instead of the requirements in chapter 6 of IFRS 9.

In total, there was an increase in IFRS equity of €126 million before deferred taxes and €109 million after deferred taxes from the initial application of IFRS 9 as of 1 January 2018. There was a positive IFRS 9 initial application effect from the classification and measurement of €158 million before deferred taxes in equity. There were no changes for financial liabilities and derivatives compared to the former accounting and measurement according to IAS 39 in pbb Group. The IFRS 9 initial application effect in equity before deferred taxes from the accounting of impairments amounted to €–32 million.

The concrete implementation of IFRS 9 by pbb Group and detailed information about the effects on the consolidated financial statements are described in the notes “Financial instruments”.

**IFRS 15: Revenue from Contracts with Customers und Clarifications to IFRS 15** IFRS 15 determines if revenue has to be recognised, and in what amounts. The amendment includes clarification regarding various rules set out in IFRS 15 and simplification concerning the transition to the new standard. The accounting requirements do not impact income recognition related to financial instruments in scope of IFRS 9. In accordance with IFRS 15, revenue has to be recognised if the customer obtains control over the contractual goods and services and can obtain benefits from these goods and services. Referring to the existing products and contractual arrangements of pbb Group, there have not been material changes to the timing and amount of revenue recognition compared to the former regulation of IAS 18 Revenue. There have not been material effects on pbb Group's development in earnings, assets and financial position from the initial applications of these further standards, in particular from modified retrospectively initial application of IFRS 15.

**IFRIC 22: Foreign Currency Transactions and Advance Considerations** For prepayments made in foreign currency transactions, the interpretation provides guidance for the determination of the exchange rate. pbb Group did not have material effects from the initial application.



#### Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions

The amendments to IFRS 2 have been published in order to clarify classification and measurement of share-based payment transactions. pbb Group did not have material effects from the initial application.

#### Amendments to IFRS 4: Applying IFRS 9 Financial Instrument with IFRS 4 Insurance Contracts

The amendments refer to the initial application of IFRS 9 by insurers. There have not been any effects on pbb Group as a result of these amendments.

#### Amendments to IAS 40: Transfers of Investment Properties

The amendments clarify the requirements regarding transfers to or from investment properties. There have not been effects from the initial application as pbb Group has not owned investment properties in the years 2017 and 2018.

#### Annual Improvements to IFRS Standards 2014–2016 Cycle

The annual improvements contain several minor amendments to standards especially IAS 1 and IAS 28 from which pbb Group has not been materially affected.

#### IFRS, Interpretations and Amendments endorsed by the EU but not yet effective

An early adoption of standards, interpretations and amendments, which will be applicable in future financial years, is not planned. The following standards, amendments and interpretations were endorsed by the EU as of the balance sheet date, but their application is not yet required:

Name	Publication	Initial application	Expected effects
IFRS 16 Leases	13.1.2016	1.1.2019	See description
IFRIC 23 Uncertainty over Income Tax Treatments	7.6.2017	1.1.2019	See description
Amendments to IFRS 9: Prepayment Features with Negative Compensation	12.10.2017	1.1.2019	The amendments shall enable a measurement at amortized cost or fair value through other comprehensive income also for such financial assets with prepayment options at which one party gets or pays an appropriate compensation (appropriate negative compensation) at termination. There will probably not be effects as pbb Group does not hold relevant contracts for the scope of the amendment.

**IFRS 16 Leases** The new standard on lease accounting will replace IAS 17 as well as the related interpretations IFRIC 4 SIC 15 and SIC 27. According to the new regulations, lessees have to recognise the majority of leases going forward. However, the new standard provides options according to which exemptions apply to leasing contracts with lease terms of 12 months or less as well as underlying assets with low values. pbb Group will apply these options. IFRS 16's approach to lessor accounting is substantially unchanged from IAS 17 rules. Moreover, the new standard comprises detailed regulations on sale-and-lease-back transactions as well as on the disclosure of lease modifications and reassessments without contractual modifications. In addition, disclosure requirements for lessees and lessors were extended compared to IAS 17. IFRS 16 is required to be applied for financial years beginning on or after 1 January 2019. IFRS 16 may be applied with full retrospective effect according to IAS 8, or with a modified retrospective effect based on the transitional regulations as defined in the standard.

pbb Group will initially apply IFRS 16 modified retrospectively as of 1 January 2019. Prior-year figures for 2018 will remain unchanged. The contracts will be measured as if they had started as of 1 January 2019 – with identical values for lease liabilities and the right-of-use assets. Therefore, there will not be a cumulative effect on retained earnings from the initial application of IFRS 16 as of 1 January 2019.

With regard to its activities as lessor, pbb Group only expects an expansion of disclosures in the notes. pbb Group has not performed any sale-and-lease-back transactions and does not plan to do such transactions in future. The most significant impacts will affect pbb Group in its role as lessee. The right-of-use assets as well as the corresponding lease liabilities which reflect the payment obligation of rental payments will have to be recognised in the amount of the present values of lease payments resulting in a balance sheet extension. Land and buildings used by pbb Group under lease contracts are relevant in this context. pbb Group takes into account the most likely scenario based on its own assessment for options regarding prolongations or early terminations of lease contracts. pbb Group discounts the included lease payments with the incremental borrowing rate for the measurement of lease liability. The right-of-use asset to be recognised and the lease liability to be recognised had a book value of €9 million as of 1 January 2019, the date of initial application of IFRS 16. Accordingly, the balance sheet will be extended by this amount as of 1 January 2019.

In relation to the income before and after taxes of pbb Group, only minor total effects on consolidated income are expected in the subsequent application of the standard. However, there will be smaller shifts between individual line items in the income statement, especially a reduction of general and administrative expenses in favour of net income from write-downs and write-ups of non-financial instruments as well as a minor burden of net interest income.

In 2016, pbb Group started a project for the implementation of the new requirements of IFRS 16. The software for the accounting of lease contract from the perspective of a lessee was implemented in 2018 so that pbb Group can apply IFRS 16 as of 1 January 2019, on schedule.

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

#### **IFRS, Interpretations and Amendments issued but not yet endorsed by the EU**

The following standards, interpretations or amendments have not yet been endorsed by the European Union at the balance sheet date:

Name	Publication	Initial application	Expected effects
Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures	12.10.2017	1.1.2019	The amendments of IAS 28 clarify that IFRS 9 has to be applied on long-term interests in an associate or joint venture to which the equity method is not applied. pbb Group already accounts for such interests at fair value through profit or loss so that no effects are expected.
Amendments to IAS 19: Plan Amendment, Curtailment or Settlement	7.2.2018	1.1.2019	The amendments concern the accounting of amendments, curtailments or settlements of a defined benefit plan. Such changes of defined benefit plans are rather unusual in pbb Group. Material effects are not expected for pbb Group.
Annual Improvements to IFRS Standards 2015–2017 Cycle	12.12.2017	1.1.2019	The amendments contain changes and corrections of the IFRS which IASB considers non-urgent but necessary. No material effects on pbb Group are expected.
Amendments to References to the Conceptual Framework in IFRS Standards	29.3.2018	1.1.2020	The amended conceptual framework contains revised definitions of assets and liabilities and new guidelines for measurement and derecognition, disclosure and notes. No material effects are expected for pbb Group.
Amendment to IFRS 3 Business Combinations	22.10.2018	1.1.2020	The changes support the identification of business in the sense of IFRS 3 in contrast to groups of assets. There may be effects on pbb Group depending on future acquisitions.
Amendments to IAS 1 and IAS 8: Definition of Material	31.10.2018	1.1.2020	The IASB clarified the definition of "material" and aligned the definition used in the conceptual framework and the standards themselves. There will probably not be material effects on pbb Group.
IFRS 17 Insurance Contracts	18.3.2017	1.1.2022	IFRS 17 regulates the principals in relation to recognition, measurement and disclosure as well as notes for insurance contracts. At the moment pbb Group does not expect material effects as pbb Group does not operate as an insurance provider.

### Statement of compliance for the German Corporate Governance Code

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

### Combined Management Report

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

### 3 Consistency

pbb Group applies its accounting policies on a consistent basis in accordance with the Conceptual Framework for Financial Reporting as well as IAS 1 and IAS 8.

#### **Changes in Presentation Structure of Income Statement and Statement of Financial Position**

In line with IAS 8.14, pbb Group has changed the structure and the presentation of the items reported in the income statement and the statement of financial position as well as the related notes, starting from the financial year 2018. Accordingly the characteristics of the transactions reported in the line items were adjusted. The presentation of the top line items does no longer primarily follow the product-specific logic, which was common practice in Germany, but will be based on the internationally accepted presentation focusing on measurement categories. The sub-items in the statement of financial position are structured by product types.

To a large degree, the new structure follows the banking supervisory requirements of financial reporting (FinRep). This is a procedure for a standardised financial reporting and submission for financial and credit institutes published by the Committee of European Banking Supervisors and subsequently by the European Banking Authority (EBA). By introducing the changes, pbb Group increases the transparency of its financial reporting, since the application of different measurement bases for different classes of assets in accordance with IAS 1.59 suggests that their nature or function differs.

The respective line items of the income statement and the statement of financial position are explained in the following. In addition, the income statement for financial year 2017 as well as the statement of financial position as at 31 December 2017 is reconciled from the old to the new structure.

The individual line items of the income statement comprise the following:

- > "Net interest income" primarily includes current interest income and expenses, but no gains or losses from the disposal of financial assets or the early redemption of liabilities, as well as no prepayment fees. The line item also does not comprise additions and reversals of provisions that are similar to interest.
- > "Net fee and commission income", which is unchanged from the previous presentation method, shows the non-accruable fees.
- > "Net income from fair value measurement" includes the changes in the fair value of stand-alone derivatives and of non-derivative financial assets that are required to be accounted for at fair value through profit or loss due to the cash flow criterion and the business model criterion set out in IFRS 9.
- > "Net income from realisations" includes gains or losses from the disposal of financial assets, e.g. within the framework of sales of financial assets, redemptions of liabilities, prepayment fees or modifications, including derecognition of the previous financial instrument and recognition of the modified financial instrument.
- > "Net income from hedge accounting", which is unchanged from the previous presentation method, includes hedge inefficiencies within the permitted range.
- > "Net other operating income" consists of components of the previous net other operating income, such as rental income, effects from the disposal of non-financial assets, and from currency translation as well as additions and reversals of provisions. The item no longer includes expenses for the bank levies.
- > "Net income from risk provisioning" comprises additions and reversals of allowances of all three stages in relation to all financial loans and advances and securities not measured at fair value through profit or loss. Additions and reversals of allowances for loans and advances were previously reported in the item "loan loss provisions", while those for securities were shown under "net income from financial investments".

- > "General and administrative expenses" remain largely unchanged compared to the previous presentation method. However, net income from write downs and write ups of non-financial assets are no longer included, but presented in a separate item.
- > The item "expenses from bank levies and similar dues" mainly consists of expenses for bank levies and deposit protections.
- > "Net income from write-downs and write-ups of non-financial assets" comprise depreciation, amortisation, impairment losses and reversals of impairment losses on non-financial assets.

### Reconciled income statement from old to new structure for the period from 1 January to 31 December 2017

Presentation according to old structure in € million	Write-downs <sup>1)</sup>	Portfolio-based allowances <sup>2)</sup>	Bank levies/ deposit protection <sup>3)</sup>	Derecognition of financial instruments <sup>4)</sup>	Provisions similar to interests <sup>5)</sup>	Adjustments due to roundings	Presentation according to new structure in € million
Net interest income	435	-	-	-45	17	-	407
Net fee and commission income	8	-	-	-	-	-	8
Net trading result	-5	-	-	-	-	-	-5
(no corresponding item)	-	-	-	45	-	-	45
Net income from financial investments	-4	-	4	-	-	-	-
Net income from hedging relationships	-1	-	-	-	-	-	-1
Net other operating income/expenses	-9	4	-	20	-17	1	-1
Loan loss provisions	-6	-	-4	-	-	-	-10
General and administrative expenses	-216	10	-	8	-	-1	-199
(no corresponding item)	-	-	-	-28	-	-	-28
(no corresponding item)	-	-14	-	-	-	-	-14
Net miscellaneous income/expenses	2	-	-	-	-	-	2
<b>Profit or loss before tax</b>	<b>204</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>204</b>
Income taxes	-22	-	-	-	-	-	-22
<b>Net income/loss</b>	<b>182</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>182</b>

<sup>1)</sup> Depreciation/amortisation/impairments and reversals of non-financial assets (in particular tangible and intangible assets) as well as write-downs of salvage acquisitions are no longer presented in "general and administrative expenses" respectively "net other operating income/expenses" but in "net income from write-downs and write-ups of non-financial assets".

<sup>2)</sup> Portfolio-based allowances on securities are no longer presented in "net income from financial investments" but in "net income from risk provisioning".

<sup>3)</sup> Expenses for bank levies are no longer presented in "net other operating income" and expenses for deposit protection fund are no longer presented in "general and administrative expenses" but in a separate position "expenses from bank levies and similar dues".

<sup>4)</sup> Income and expenses from derecognition of loans and advances (prepayment fees, gains or losses from disposals, reversals of accrued fees) and from derecognition of liabilities are no longer presented in "net interest income" but in "net income from realisations".

<sup>5)</sup> Additions and reversals of provisions similar to interests are no longer presented in "net interest income" but in "net other operating income".

The individual line items of the assets side comprise the following:

- > The "cash reserve", which is unchanged from the previous presentation method, contains balances with central banks.
- > The line item "financial assets at fair value through profit or loss" includes the positive market values of stand-alone derivatives and financial assets that are to be allocated to the measurement category "at fair value through profit or loss" due to the cash flow criterion or the business model criterion set out in IFRS 9. The instruments were previously reported in the line items "trading assets", "loans and advances" and "financial investments". The positions "positive fair values of stand-alone derivatives", "debt securities", "loans and advances to customers" and "other financial assets at fair value through profit or loss" are presented as sub-items.
- > The line item "financial assets at fair value through other comprehensive income" consists of financial assets of the measurement category "at fair value through other comprehensive income". Financial assets of this measurement category are held within the context of a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and whose contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. The instruments were previously reported in the line item "financial investments (AfS)". The positions "debt securities", "loans and advances to other banks", "loans and advances to customers" and "other financial assets at fair value through other comprehensive income" are presented as sub-items.
- > Financial assets allocated to the measurement category at amortised cost are reported in the line item "financial assets at amortised cost before credit loss allowances". These financial assets are held within the context of a business model whose objective is to hold financial assets in order to collect contractual cash flows, and whose contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. The holdings were previously reported as "loans and advances" and "financial investments". The positions "debt securities", "loans and advances to other banks" and "loans and advances to customers" are presented as sub-items.
- > The deduction item "credit loss allowances on financial assets at amortised cost" includes the allowances of all three levels in relation to all financial assets that are not measured at fair value through profit or loss. The allowances can refer both to loans and advances and to securities. Allowances in relation to loans and advances were previously reported as "loan loss allowances". Allowances in relation to securities were previously directly offset against the carrying amount of the securities and reported under "financial investments" (31 December 2017: €13 million).
- > The line item "positive fair values of hedge accounting derivatives", which remains unchanged from the previous presentation method, consists of derivatives having a positive fair value that are used as hedging instruments within the context of micro fair value hedges or the portfolio hedge of interest rate risks.
- > The line item "valuation adjustment from portfolio hedge accounting (assets)", which remains unchanged from the previous presentation method, comprises fair values of the hedged risks in the hedged cash flows from the portfolios of hedged items on the asset side.
- > The line item "other assets" includes other non-financial assets. Compared to the previous presentation method, this item no longer comprises hedge accounting derivatives.
- > The line items "tangible assets", "intangible assets", "current income tax assets" and "deferred income tax assets" have not changed compared with the previous presentation method regarding their composition and nature.

The individual line items of the equity and liabilities side comprise the following:

- > The line item “financial liabilities at fair value through profit or loss” includes stand-alone derivatives with a negative fair value. The item has not changed compared to the previous line item “trading liabilities”.
- > Financial liabilities allocated to the measurement category at amortised cost are reported in the line item “financial liabilities at amortised cost”. The financial liabilities were previously reported in the line items “liabilities to other banks”, “liabilities to customers”, “securitised liabilities” and “subordinated capital”, which are now presented as sub-items. Within this second level registered bonds are now presented as “liabilities to other banks” and “liabilities to customers” instead of “securitised liabilities”. As a result, “bearer bonds” are now presented in a separate line item. As of 31 December 2017, registered bonds in the amount of €517 million (1 January 2017: €600 million) were reclassified to “liabilities to other banks” and in the amount of €17,969 million (1 January 2017: €19,029 million) to “liabilities to customers”.
- > The line item “negative fair values of hedge accounting derivatives” consists of derivatives with a negative fair value that are used as hedging instruments within the context of micro fair value hedges or portfolio hedges of interest rate risks.
- > The line item “valuation adjustment from portfolio hedge accounting (liabilities)”, which is unchanged from the previous presentation method, comprises fair values of the hedged risks in the hedged cash flows from the portfolios of hedged items on the liability side.
- > The line item “provisions” has remained virtually unchanged compared with the previous presentation regarding its composition and nature. Since 1 January 2018, this item includes provisions for commitments and guarantees given (1 January 2018: €2 million), which were formerly presented in “loan loss allowances” until 31 December 2017.
- > The line item “other liabilities” includes other non-financial liabilities. Compared with the previous presentation method, this item no longer comprises hedge accounting derivatives.
- > The line items “current income tax liabilities” and “deferred income tax liabilities” remain unchanged compared to the previous presentation method regarding its composition and nature.
- > The composition of “equity” has remained largely unchanged compared with the former presentation structure. Accumulated other comprehensive income consists of gains and losses from pension commitments, from cash flow hedge accounting and from financial assets measured at fair value through other comprehensive income.

## Reconciled statement of financial position from old to new structure as of 31 December 2017/1 January 2018

Presentation according old structure	Carrying amount IAS 39	Presentation according new structure	Carrying amount IAS 39	Presentation according new structure	Carrying amount IFRS 9	Revaluation (effect from initial adoption of IFRS9)
	31.12.2017 in € million		31.12.2017 in € million		1.1.2018 in € million	
Cash reserve	999	Cash reserve	999	Cash reserve	999	–
Trading assets (HfT)	870	Financial assets at fair value through profit or loss – Positive fair values of stand-alone derivatives	870	Financial assets at fair value through profit or loss – Positive fair values of stand-alone derivatives	870	–
Loans and advances to other banks (LaR)	2,415	Financial assets at amortised cost – Loans and advances to other banks	2,415	Financial assets at amortised cost – Loans and advances to other banks	2,400	2
				Financial assets at fair value through other comprehensive income – Loans and advances to other banks	17	
Loans and advances to customers (LaR)	40,274	Financial assets at amortised cost – Loans and advances to customers	40,274	Financial assets at amortised cost – Loans and advances to customers	39,360	–3
				Financial assets at fair value through other comprehensive income – Loans and advances to customers	430	62
				Financial assets at fair value through profit or loss – Loans and advances to customers	529	–14
Allowances for losses on loans and advances	–71	Credit loss allowances on financial assets	–84	Credit loss allowances on financial assets	–104	–22
Valuation adjustment from portfolio hedge accounting (assets)	–1	Valuation adjustment from portfolio hedge accounting (assets)	–1	Valuation adjustment from portfolio hedge accounting (assets)	–1	–
Financial investments (LaR)	8,240	Financial assets at amortised cost – Debt securities	8,253	Financial assets at amortised cost – Debt securities	6,961	4
				Financial assets at fair value through other comprehensive income – Debt securities	992	23
				Financial assets at fair value through profit or loss – Debt securities	333	6
Financial investments (AfS)	2,385	Financial assets at fair value through other comprehensive income – Debt securities	2,385	Financial assets at amortised cost – Debt securities	1,706	68
				Financial assets at fair value through other comprehensive income – Debt securities	743	–1
				Financial assets at fair value through profit or loss – Other financial assets at fair value through profit or loss	3	–
Property and equipment	6	Tangible assets	6	Tangible assets	6	–
Intangible assets	36	Intangible assets	36	Intangible assets	36	–
Other assets	2,712	Other assets	34	Other assets	34	–
Income tax assets	129	Income tax assets	129	Income tax assets	113	–
Current income tax assets	42	Current income tax assets	42	Current income tax assets	42	–
Deferred income tax assets	87	Deferred income tax assets	87	Deferred income tax assets	71	–16
<b>Total assets</b>	<b>57,994</b>		<b>57,994</b>		<b>58,105</b>	<b>109</b>



Presentation according old structure	Carrying amount IAS 39	Presentation according new structure	Carrying amount IAS 39	Presentation according new structure	Carrying amount IFRS 9 1.1.2018	Revaluation (effect from initial adoption of IFRS9)
	31.12.2017 in € million		31.12.2017 in € million		in € million	in € million
Liabilities to other banks (at amortised cost)	3,280	Financial liabilities at amortised cost – Liabilities to other banks	3,797	Financial liabilities at amortised cost – Liabilities to other banks	3,797	–
Liabilities to customers (at amortised cost)	8,275	Financial liabilities at amortised cost – Liabilities to customers	26,244	Financial liabilities at amortised cost – Liabilities to customers	26,244	–
Securitised liabilities (at amortised cost)	38,362	Financial liabilities at amortised cost – Bearer bonds	19,876	Financial liabilities at amortised cost – Bearer bonds	19,876	–
Valuation adjustment from portfolio hedge accounting (liabilities)	–	Valuation adjustment from portfolio hedge accounting (liabilities)	–	Valuation adjustment from portfolio hedge accounting (liabilities)	–	–
Trading liabilities (HfT)	956	Financial liabilities at fair value through profit or loss – Negative fair values of stand-alone derivatives	956	Financial liabilities at fair value through profit or loss – Negative fair values of stand-alone derivatives	1,040	84
Provisions	245	Provisions	245	Provisions	247	–
Other liabilities	2,959	Other liabilities	70	Other liabilities	70	–
Thereof: Negative market values of hedging derivatives	2,889	Negative fair values of hedge accounting derivatives	2,889	Negative fair values of hedge accounting derivatives	2,805	–84
Income tax liabilities	57	Income tax liabilities	57	Income tax liabilities	57	–
Current income tax liabilities	57	Current income tax liabilities	57	Current income tax liabilities	57	–
Subordinated capital	1,002	Financial liabilities at amortised cost – Subordinated liabilities	1,002	Financial liabilities at amortised cost – Subordinated liabilities	1,002	–
<b>Liabilities</b>	<b>55,136</b>		<b>55,136</b>		<b>55,138</b>	<b>–</b>
<b>Equity attributable to the shareholders</b>	<b>2,858</b>		<b>2,858</b>		<b>2,967</b>	<b>109</b>
Subscribed capital	380	Subscribed capital	380	Subscribed capital	380	–
Additional paid-in capital	1,637	Additional paid-in capital	1,637	Additional paid-in capital	1,637	–
Retained earnings	731	Retained earnings	731	Retained earnings	722	–9
Consolidated profit	182	Consolidated profit	182	Consolidated profit	182	–
Gains/losses on pension commitments and revaluation reserve	–72	Accumulated other comprehensive income	–72	Accumulated other comprehensive income	46	118
<b>Equity</b>	<b>2,858</b>		<b>2,858</b>		<b>2,967</b>	<b>109</b>
<b>Total liabilities and equity</b>	<b>57,994</b>		<b>57,994</b>		<b>58,105</b>	<b>109</b>

## Segment Reporting

Segment reporting is the basis for the internal corporate management. Effective from 1 January 2018, pbb Group changed the structure of its internal organisation in such way that the amount of profit before tax as well as the amount of allocated equity of reportable segments changed. These changes relate to the allocation of costs for liquidity (reported in net interest income), prepayment penalties (reported in gains or losses from derecognition of financial instruments not measured at fair value through profit or loss) and equity to the business segments and thus also of income from investing own funds (included in net interest income).

- > As in the past, net interest income is calculated as the customer interest rate received less the funding rates with matching maturities valid at the time the transaction is concluded. The required input parameters are determined at the time the new transaction is concluded in single transaction costing. The allocation of costs for providing liquidity to the business segments was adjusted. These costs are now only shown for individual transactions via the transfer price mechanism and are no longer invoiced to the segments at portfolio level on a costing basis as before.

- > The prepayment penalties received are allocated to the segments for individual transactions and not, as in the past, according to the size of the segments.
- > Equity is allocated proportionally to the distribution of diversified economic capital to the business segments on the assumption of continuing operations and also takes into account the effects of changes in risk parameters resulting from the harmonisation of risk models. As a result, a higher amount of equity is allocated to the Real Estate Finance (REF) segment in particular. Previously, equity was allocated in proportion to the distribution of diversified economic capital based on the gone-concern approach of the risk management.

pbb Group has adjusted the segmentation of income and expenses for the comparable prior-year period, and of equity as of 31 December 2017, in accordance with IFRS 8.29. As a result of the changes, profit before tax in the Real Estate Finance (REF) segment rose, whilst profit before tax in the Public Investment Finance (PIF) and Value Portfolio (VP) segments decreased.

Apart from the adjustments described above, pbb Group applied the same accounting and valuation principles to the consolidated financial statements as at 31 December 2018 compared to the reporting date of 31 December 2017.

## 4 Consolidation

Numbers of subsidiaries/entities <sup>1)</sup>	Fully consolidated subsidiaries		Not fully consolidated subsidiaries <sup>2)</sup>		Associated entities and other investments		Total
	Total	Thereof special-purpose entities	Total	Thereof special-purpose entities	Associated entities	Other investments	
<b>1.1.2017</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>16</b>
Additions	1	-	-	-	-	-	1
Disposals	-5	-3	-	-	-	-1	-6
Mergers/accruals	-1	-	-	-	-	-	-1
<b>31.12.2017</b>	<b>4</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>2</b>	<b>10</b>
<b>1.1.2018</b>	<b>4</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>2</b>	<b>10</b>
Additions	1	-	-	-	-	-	1
Disposals	-	-	-1	-	-1	-1	-3
Mergers/accruals	-1	-	-	-	-	-	-1
<b>31.12.2018</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>7</b>

<sup>1)</sup> pbb, subsidiaries, associated companies and other investments.

<sup>2)</sup> Due to immateriality not fully consolidated.

A subsidiary is an entity that is controlled by another entity. Control is deemed to exist if pbb has decision-making powers to manage relevant activities, has a right to significant returns from the subsidiary, and can use its decision-making powers to influence the amount of significant variable returns.

Structured entities are entities in which voting rights or similar rights are not the dominant factors in determining control, such as if the voting rights relate merely to administrative duties and the relevant activities are governed by contractual agreements. As for subsidiaries, structured entities must be consolidated if the structured entity is controlled.

Immo Immobilien Management Beteiligungsgesellschaft mbH, Munich, of which pbb holds 100% of the interests and which was not previously consolidated due to its minor significance, was consolidated in the consolidated financial statements for the first time at the beginning of the year 2018. IMMO Immobilien Management GmbH & Co.KG, Munich, was merged into Immo Immobilien Management Beteiligungsgesellschaft mbH (in liquidation since October 2018) in May 2018. This had no impact on pbb Group's development in assets, financial positions and earnings.

Apart from that there have not been any changes in the group of consolidated companies of pbb Group in 2018.

#### **Uniform Consolidated Accounting**

The unconsolidated financial statements of the consolidated domestic and foreign companies are incorporated in the consolidated financial statements of pbb using uniform accounting and measurement principles.

#### **Consolidation Principles**

At the acquisition date the costs of a business combination are allocated by recognising the acquiree's identifiable assets, liabilities and contingent liabilities that comply with the recognition criteria according to IFRS 3.10 at their fair values at that date. Any difference between the cost of the business combination and the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities recognised are accounted for as goodwill or as an excess of acquirer's interest in the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities in accordance with IFRS 3.32–36. If the interest in net fair value of the identifiable assets, liabilities and contingent liabilities exceeds the costs of business combination the acquirer shall reassess the identifiable assets, liabilities and contingent liabilities and the measurement of the cost of the business combination, and immediately recognise in profit or loss any excess remaining after reassessment.

Business relations within the group of consolidated companies are offset against each other for consolidation purposes. Intercompany results attributable to internal transactions are eliminated.

There are no material interests in associated companies or joint ventures. The holdings which are not material from a group point of view are recognised at fair value through profit or loss (FVPL).

## 5 Disclosures of Interests in Subsidiaries

These Consolidated Financial Statements include a list of shareholdings in the Note "Holdings of pbb" containing subsidiaries and other shareholdings. The financial year for all fully-consolidated companies is principally the calendar year. Immo Immobilien Management Beteiligungsgesellschaft i.L. had a short financial year with 31 December 2018 as the balance sheet date. pbb Group does not have any subsidiaries which are not consolidated as of 31 December 2018.

### Significant Restrictions with respect to the Usability of Assets within the Group

Statutory, contractual or regulatory restrictions and protective rights of non-controlling interests may limit the Group in its ability to obtain access to the assets and to easily transfer them to respectively from another company or other companies and settle the Group's liabilities. As of the balance sheet date the Group had no significant interests over which it could not exert control in the sense of IFRS. 100% of the voting rights are retained in all the companies controlled by pbb. Consequently, there are no significant restrictions due to third-party protective rights.

## 6 Disclosures of Interests in Associates

After the derecognition of WISUS Beteiligungs GmbH & Co. Zweite Vermietungs-KG, Munich, for a sales price of less than €1 million and without an effect on the development in earnings pbb Group held interests in two associated companies (31 December 2017: three). These interests are not included at equity in the group financial statements due to their immateriality, but are accounted for at fair value through profit or loss (FVPL) according to IFRS 9.

The total amount of the book values of the company's interests in associated companies individually regarded as immaterial shares amounted to €0 million (31 December 2017: €0 million). The totals of the Group's interests in the profit or loss of the interests in associated companies individually regarded as immaterial shares amounted to €1 million (2017: €1 million).

## 7 Financial Instruments

According to IAS 32, a financial instrument is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

### Recognition and Derecognition

pbb Group recognises a financial asset or a financial liability in its statement of financial position if a Group company becomes party to the contractual provisions of the financial instrument.

The purchases or sales of financial instruments are recognised on the trading date. Premiums and discounts are recognised in accordance with the accrual concept in the position net interest income. In accordance with the primary derecognition concept of IFRS 9, a financial asset has to be derecognised if all risks and rewards have substantially been transferred. If the main risks and rewards of ownership of the transferred financial asset are neither transferred nor retained, and if control over the transferred asset is retained, the Company has to recognise the asset to the extent of its continuing involvement. There are no transactions within pbb Group which result in partial derecognition due to a continuing involvement.

In case of repos and synthetic securitisations the assets transferred do not qualify for derecognition because derecognition criteria of IFRS 9 are not met.

Collateral with the same counterparty and same conditions (e.g. ISDA master agreement) must be netted. Accordingly, only the net amount is disclosed.

### **Classification and Measurement of Financial Instruments**

A financial asset or a financial liability shall be measured at its fair value at initial recognition plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

The amortised costs are the amount at which the financial asset or financial liability is measured at initial recognition minus the principal payments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any loss allowance.

Financial instruments at fair value are measured on the basis of stock market prices or other market prices, if existent (Level 1). If a price is not available from an active market, observable market prices from comparable financial instruments are used (Level 2). If prices from comparable financial instruments are not available, valuation models are used that are based on observable market parameters. If these parameters are not observable at the markets, the measurement of the financial assets is based on models with non-market-observable parameters (Level 3). The measurement models used are market standard models. A description of these models and the products is given in the Note "Fair Values of Financial Instruments".

The best evidence of the fair value of a financial instrument at initial recognition is normally the transaction price, i.e. the fair value of the consideration given or received. If pbb Group determines that the fair value at initial recognition differs from the transaction price the financial instrument will be measured at fair value at initial recognition if that fair value is evidenced by a quoted price in an active market for an identical asset or liability (Level 1) or based on a valuation technique that uses only data from observable markets (Level 2). pbb Group records the difference as a gain or loss in these cases. In all other cases the difference between the fair value and the transaction price (so called day one profit) is deferred. In the financial years 2018 and 2017 there were no material day one profits.

The classification and subsequent measurement of financial instruments according to IFRS 9 was changed substantially compared to IAS 39. The former measurement categories valid pursuant to IAS 39 at fair value through profit or loss – consisting of held for trading (HfT) and designated at fair value through profit or loss (dFVTPL) –, held to maturity (HtM), loans and receivables (LaR) and available for sale (AfS) were replaced by the following measurement categories in IFRS 9:

- > at fair value through profit or loss (FVPL)
- > at fair value through other comprehensive income (FVOCI)
- > at amortised cost (AC)

The categorisation of financial assets depends on the entity's business model for managing financial assets (business model criterion) and the contractual cash flow characteristics of the financial asset (contractual cash flow criterion) at initial recognition.

A financial asset shall be measured at amortised cost (AC) if both of the following conditions are met:

- > the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- > the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

A financial asset shall be measured at fair value through other comprehensive income (FVOCI) if both of the following conditions are met:

- > the financial asset is held within a business model whose objective is achieved by both collecting cash flows and selling financial assets; and
- > the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

A financial asset shall be measured at fair value through profit or loss (FVPL) unless it is measured at amortised cost or at fair value through other comprehensive income. However, an entity can make an irrevocable election at initial recognition for particular investments in equity instruments that would otherwise be measured at fair value through profit or loss to present subsequent changes in fair value in other comprehensive income. pbb Group holds equity instruments of an insignificant amount. These are measured at fair value through profit or loss.

In the first step the financial assets are categorised based on business model criterion. An entity's business model is determined at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. Accordingly, this condition is not an instrument-by-instrument approach to classification and should be determined on a higher level of aggregation. For this purpose, the entity must consider all relevant evidence that is available at the date of assessment. Such relevant evidence includes, but is not limited to:

- > how the performance of the business model and the financial assets held within that business model are evaluated and reported to the entity's key management personnel;
- > the risks that affect the performance of the business model (and the financial assets held within that business model) and, in particular, the way in which those risks are managed;
- > how managers of the business are compensated (for example, whether the compensation is based on the fair value of the assets managed or the contractual cash flows collected);
- > the expected frequency, value and timing of sales in prior periods, the reasons for those sales and expectations about future sales activities.

Principally, pbb Group aggregates its financial assets for the determination of the business model criterion on the level of segments. However, deals to be syndicated form special portfolios in the segments Real Estate Finance (REF) and Public Investment (PIF). In addition, the Value Portfolio (VP) is divided in a portfolio with the intention to hold and in a portfolio with the intention to hold and sell. Furthermore, Consolidation & Adjustments contain the liquidity portfolio for which an intention to hold and sell exists in addition to portfolios with the intention to hold.

In line with IFRS 9B4.1.3A the business model may be hold to collect contractual cash flows even if the entity sells financial assets in specific situations. Such exceptions can be driven by an increased credit risk of the financial asset which amongst others pbb Group measures by the loan to value of the financing or a change to non-investment grade. Further exceptions are sales of financial assets with a short remaining maturity if the realized proceeds approximate the remaining cash flows. In addition, sales may be consistent with the business model hold to collect contractual cash flows if those sales are more than infrequent (even if significant in value) or insignificant in value either individually or aggregated (even if frequent). Amongst others, pbb Group sets the volume of sold assets in relation to the total volume of the portfolio to which the assets belong for the determination of significance.

pbb Group has to reclassify financial assets if it changes the business model for managing those financial assets. Such changes which are expected to be very infrequent are determined by the senior management as a result of externally or internally significant changes and externally demonstrable changes. Examples may be in the context of business combinations or shut downs of operations. There have not been reclassifications of financial assets in the year 2018.

In the second step of the categorisation an entity has to classify a financial asset on the basis of the contractual cash flow characteristics (contractual cash flow criterion). For this, an entity shall assess whether contractual cash flows are solely payments of principal and interest on the principal amount outstanding. The principal is the fair value of the financial asset at initial recognition. Interest consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks (for example, liquidity risk) and costs, as well as a profit margin. When assessing the contractual cash flows pbb Group also considers derivatives embedded in a host contract. For example, if leverage increases the volatility of the contractual cash flows the contractual cash flow criterion will not be fulfilled. Furthermore, for financings of structured entities without the right of recourse on specific assets of the borrower or payments from these assets has to be assessed whether pbb Group has primarily a loan risk or an investment risk. If there is primarily an investment risk but not primarily a loan risk the contractual cash flow criterion will not be fulfilled. pbb Group assesses this distinction on the basis of the loan to value at the date of the initial recognition of the financial asset.

An entity may, at initial recognition, irrevocably designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the resulting gains and losses on different bases (so called fair value option). pbb Group does not use the fair value option for financial assets.

Non derivative financial liabilities have to be measured at amortised cost, unless they are hold for trading purposes or are designated at fair value through profit or loss. As of 31 December 2018 and 31 December 2017 pbb Group has not issued compound financial instruments with multiple embedded derivatives.

The amount of change in the fair value of financial liabilities designated at fair value through profit or loss (fair value option) that is attributable to changes in credit risk of that liability shall be presented in other comprehensive income and the remaining amount of change in profit or loss. pbb Group does not have non-derivative financial liabilities measured at fair value through profit or loss and does not use the fair value option for financial liabilities. Derivatives have to be measured at fair value through profit or loss as before unless they are used as hedging instruments in the scope of cash flow hedge accounting.

The European Market Infrastructure Regulation (EMIR) imposes a clearing obligation for standardised Over-The-Counter (OTC) derivatives. pbb uses Eurex Clearing as central clearing agent for derivatives. For Eurex cleared transactions, pbb applies on-balance sheet netting. On-balance sheet netting is applied for each currency, and comprises the carrying amounts of the derivatives as well as the margins calculated (and collected or credited) by Eurex Clearing. The net book values are disclosed under "positive fair values of hedge accounting derivatives" or "negative fair values of hedge accounting derivatives".

In alignment with the customer the contractual cash flows of a financial instrument in the existing business may be renegotiated or otherwise modified. Such changes made to existing terms of a contractual relationship during the contract term are called modifications. Modifications may be market-driven commercial renegotiations or can be performed to avoid larger credit defaults. It is necessary to check whether the modification is significant or insignificant.

Significant modifications are substantial to the extent that they, in essence, constitute a new financial instrument. The modification can be significant due to qualitative (for example change of counterparty or of currency) or due to quantitative reasons. In case of significant modifications the old financial instrument has to be derecognized and a modified new financial asset has to be recognized as a new asset. The effects from derecognition affecting profit or loss are disclosed in net income from realisations. In the year 2018 pbb Group has not performed any significant modifications.

In case of insignificant modifications the agreed amendments to the contractual cash flows have to be discounted and the difference between the present value of the modified contractual payments determined in this way and the carrying amount (present value of the contractual payments before modification) are recognized through profit or loss. In 2018 the effects from insignificant modifications were not material.

Loans at risk of default are restructured by pbb Group if the borrower's financial position has deteriorated but a positive going-concern forecast for the loan exposure can still be expected. This is carried out by changing the underlying terms and conditions or side agreements by means of a unilateral or mutual declaration of intent. Restructuring agreements should maximise opportunities for pbb Group to realise its outstanding loans or at least minimise the risk of default of the loan exposure. These generally include inter alia standstill agreements, maturity extensions, changed interest payment/repayment terms, interest/repayment reductions or the suspension of contractual agreements (e.g. financial covenants) so that the borrower is again able to meet their payment obligations. The credit risk associated with restructured loans is managed by the Group's Credit Risk Management units. The methods used to measure and manage risk are presented in the section of the Risk and Opportunity Report entitled "Credit Risk". Further information is provided in the Note "Restructured Loans and Advances".



According to IFRS 9 the non-derivative financial instruments of pbb Group are aggregated, classified and measured as follows:

- > Segment Real Estate Finance (REF): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). The exceptions are:
  - > Financial assets or parts of financial assets, for which there is an intention to syndicate (business model: financial asset is neither held within a business model whose objective is to hold financial assets in order to collect contractual cash flows nor within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets). These have to be accounted for at fair value through profit or loss.
  - > Financial assets which do not fulfill the contractual cash flow criterion and therefore have to be measured at fair value through profit or loss.
- > Segment Public Investment Finance (PIF): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). Exceptions are: Financial assets or parts of financial assets, for which there is an intention to syndicate (business model: financial asset is neither held within a business model whose objective is to hold financial assets in order to collect contractual cash flows nor within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets). These have to be accounted for at fair value through profit or loss.
- > Segment Value Portfolio (VP): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). Exceptions are:
  - > Financial assets or parts of financial assets held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. These are measured at fair value through other comprehensive income.
  - > Financial assets which do not fulfill the contractual cash flow criterion and therefore have to be measured at fair value through profit or loss.
- > Portfolios in Consolidation and Adjustments (C&A): Non-derivative financial instruments are principally measured at amortised cost (business model: financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows). Exceptions are:
  - > Financial assets held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. These financial assets of the liquidity portfolio are measured at fair value through other comprehensive income.
  - > Financial assets which do not fulfill the contractual cash flow criterion and therefore have to be measured at fair value through profit or loss.

As a consequence of the changed classification and measurement of financial assets some loans and securities have to be accounted for differently as per the former regulations of IAS 39 in the initial application of IFRS 9 on 1 January 2018:

- > 22 deals which were categorised as loans and receivables according to IAS 39 and therefore were measured at amortised cost do not fulfill the contractual cash flow criterion of IFRS 9. Therefore they have to be measured at fair value through profit or loss.
- > There was a syndication intention for parts of five deals on 1 January 2018. These parts had to be measured at fair value through profit or loss due to the business model criterion.
- > Six deals which were categorised as available for sale pursuant to IAS 39 and therefore were measured at fair value through other comprehensive income have to be measured at amortised cost according to IFRS 9.

- > 55 deals which were categorised as loans and receivables pursuant to IAS 39 and therefore were measured at amortised cost have to be accounted for at fair value through other comprehensive income according to IFRS 9 due to business model of the underlying portfolios.
- > 27 deals were recategorised from the measurement category available for sale to the measurement category loans and receivables in the year 2008. The AfS reserve of these deals which have to be accounted for at amortised cost pursuant to IFRS 9 had to be released according to IFRS 9.
- > Participations in investment funds and non-consolidated respectively non-at-equity measured entities which were part of the IAS 39 measurement category available for sale were reclassified to the IFRS 9 measurement category fair value through profit or loss.
- > The contractual cash flows of three deals were modified in the past. Therefore the carrying amount under IFRS 9 had to be adjusted.

There were no changes in the measurement for all other financial assets compared to accounting pursuant to IAS 39.

The regulation of IAS 39 which were still relevant for the comparative figures 2017 required all financial instruments to be classified according to this standard, to be disclosed in the statement of financial position and to be measured according to its categorisation:

- > Held for Trading (HfT): HfT financial instruments were measured at fair value. Changes in fair value were recognised in profit or loss. pbb Group did not have non-derivative trading instruments. A financial asset or a financial liability was held for trading if it was
  - > acquired or incurred principally for the purpose of selling or repurchasing it in the near term,
  - > part of a portfolio of identified financial instruments that are managed together and for which there was evidence of a recent actual pattern of short-term profit-taking, or
  - > a derivative (except for a derivative that was a designated and effective hedging instrument).
- > Designated at Fair Value Through Profit or Loss (dFVTPL): If certain conditions were satisfied, financial assets or liabilities could be classified as a financial asset respectively a financial liability at fair value through profit or loss when they were initially recognised. In the financial year 2017 pbb Group had no financial assets and no financial liabilities in the category dFVTPL.
- > Held to Maturity (HtM): Held-to-maturity investments were non-derivative financial assets with fixed or determinable payments and fixed maturity that an entity had the positive intention and ability to hold to maturity. HtM financial investments were measured at amortised cost. In financial years 2017 no financial assets were classified as HtM at pbb Group.
- > Loans and Receivables (LaR): Loans and receivables were non-derivative financial assets with fixed or determinable payments that were not quoted in an active market. Loans and receivables were measured at amortised cost.
- > Available for Sale (AfS): Available-for-sale assets were those non-derivative financial assets that were classified as available for sale and which were not classified as loans and receivables, held-to maturity investments or financial assets at fair value through profit or loss. pbb Group only classified securities as AfS but not loans and advances in the financial year 2017. AfS financial assets were measured at fair value. Changes in fair value were recognised in a separate item of equity (AfS reserve) not affecting profit or loss until the asset was sold, withdrawn or otherwise disposed of or if an impairment was established for the financial asset in accordance with IAS 39.58 et seq., so that the cumulative loss previously recognised in equity was recognised in profit or loss.

## Impairment

The regulations regarding impairments in accordance with IFRS 9 fundamentally differ from IAS 39 regulations and are relevant for assets measured either at "amortised cost" or at "fair value through other comprehensive income" as well as for off-balance sheet obligations, such as loan commitments and financial guarantees. The rules do not have to be applied for equity instruments. An impairment is implied for financial assets measured at fair value through profit or loss at subsequent measurement. For derivatives measured at fair value through profit or loss the maximum risk of default is reflected in the nominal value, whereas for non-derivative financial instruments measured at fair value through profit or loss it is reflected in the book value. While the IAS 39 impairment model required the recognition of loss allowances if a triggering event occurred, IFRS 9 introduces a model according to which provisions for credit losses may be created upon initial recognition of the financial asset (or on the date when the Group becomes a contracting party of the loan commitment or financial guarantee) on the basis of credit losses expected at that time. According to IFRS 9 this is an unbiased and probability-weighted amount that is determined by evaluation of a range of possible outcomes and scenarios. IFRS 9 clarifies that this is a probability weighted average and not the most probable amount.

Upon initial recognition, the impairments in lending business are based on expected credit losses within the following twelve months (so-called stage 1). The 12-months expected credit loss is part of the lifetime expected credit losses and corresponds to the expected credit losses from defaults that may occur for the financial instrument within twelve months after balance sheet date. In case of a significant increase in the financial asset's credit risk within the context of subsequent measurement (stage 2) or in case of a credit impairment (stage 3), the impairment has to reflect the lifetime expected credit losses. pbb Group does not apply the simplified approach for loans from lease agreements but also differentiates these into the impairment stage 1 and 2.

The same definition of default is used for IFRS 9 as for regulatory purposes. For this a default is defined if

- > it is unlikely that the borrower can fully fulfil its payment obligations, or
- > the borrower has material past dues of more than 90 days.

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

pbb Group developed check criteria for the allocation to the three impairment stages of IFRS 9 which is very closely linked to the methods and instruments for credit and risk monitoring. In addition, the practice of credit risk management leads to an intensification of supervision with increasing impairment stage. Each financial asset which does not have to be measured at fair value through profit or loss has to be allocated to stage 1 at initial recognition if it is not credit-impaired. A financial asset moves to stage 2 if the credit risk has increased significantly but is not credit-impaired. This is the case if

- > as rebuttable presumption there is a past due of more than 30 days; or
- > the financial asset is non-investment grade and the multi-year probability of default at balance sheet date exceeds the multi-year probability of default at initial recognition of the financial asset by a factor of at least 2.5.

The criterion of 30 days past due can be rebutted for example in the case of so called technical past dues. This can be the case if the borrower transfers the amount owed to a wrong account and corrects this at short notice.

Counterparties of loans and securities which credit has deteriorated compared with the date of initial recognition but which still have an investment grade rating and which do not have a payment past due of more than 30 days are assessed as very low-risk in the allocation to the impairment stages.

If the credit risk of a financial assets with a significantly increased credit risk has not significantly increased any further at balance sheet date compared to the date of initial recognition the financial asset will move back to stage 1.

The criteria for a move from stage 2 to stage 3 do not differ significantly from the objective evidence according to IAS 39 leading to specific loan loss provisions. A financial asset will have to be moved to stage 3 if it is credit-impaired. A deal will be credit-impaired if one or more events that have detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include observable data about the following events:

- > significant financial difficulty of the issuer or the borrower;
- > a breach of contract, such as a default or past due event;
- > pbb Group, for economic reasons or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower concessions that pbb Group would not otherwise consider;
- > it is becoming probable that the borrower will enter bankruptcy or other financial reorganization;
- > the disappearance of an active market for that financial asset because of financial difficulties;
- > the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

For purchased or originated credit-impaired financial assets (POCI) only the cumulative changes in lifetime expected credit losses since initial recognition have to be recognised as a loss allowance at balance sheet date. For such financial assets expected credit losses shall be discounted using the credit-adjusted effective interest rate determined at initial recognition. The credit-adjusted effective interest rate has to be applied to the amortised cost from initial recognition. The recognition of interest income will have to be determined this way for the entire maturity also if the borrower recovers. The interest income is attributed to the POCI-asset, received repayments have to be recognised as repayments. pbb Group did not purchase or originate credit-impaired financial assets as of 31 December 2018 and as of 1 January 2018.

pbb Group principally uses a model-based approach for determining the amount of expected credit losses. Regulatory risk parameters (probability of default/PD, loss given default/LGD) and contract information, for example the contractually agreed cash flows, are used as a basis for determining the amount of credit losses of the stage 1 and stage 2 financial instruments. The exposure size results from the comparison of the contractually agreed cash flows and the expected cash flows. The risk parameters listed above are linked to the exposure size to determine the expected losses. In addition expectations about prepayments (so called prepayment rates), expected prolongations of loans (so called prolongation rates) and expected drawings of undrawn parts of a commitment (so called credit conversion factor/CCF) are considered in the expected cash flows. The risk parameter PD is

determined for each borrower with the aid of customer specific rating methods. Several customer specific risk factor for example the debt ratio, return indicators and similar quantitative indicators are input factors of the rating methods. The risk parameter LGD is determined with the aid of specific LGD models in which especially expected recovery ratios from the disposal of collaterals or other parts of the asset, the transaction specific ratio of current collaterals and the current book value of the loan as well as the expected time till receipt of payments are material input factors. These PD rating methods and LGD models are also methods which pbb Group uses as a standard approach for risk assessment and risk controlling. The regulatory risk parameters are transformed adequately so that the requirements of IFRS 9 are fulfilled. These include the deduction of conservative adjustments which are used for regulatory purposes, the consideration of macro-economic factors for the purpose of the so called point in time transformation and the transition from the regulatory discount rate to the effective interest rate required by IFRS 9. Particularly the transformations ensure that the risk parameters are unbiased. Historic data about rating migration together with forecasts of macro-economic developments (for example the economic growth per country and – for real estate financings – the development of collateral market values differentiated by object types and regions) are used for the determination of multi-year probabilities of default. For this information according to the type of customer are used. pbb Group forecasts relevant indicators for example market value developments or the economic growth on the basis of internal analyses and externally available data. Possible non-linearity effects are considered in the determination of the expected credit loss. The interest income is calculated by applying the effective interest rate to the gross book value (book value before risk provision) of the financial asset.

pbb Group uses forecasts of the gross domestic product (GDP) of the International Monetary Fund (IMF) for the determination of point in time probabilities of default. For deals of the impairment stage 1 only the GDP for the year 2019 is used. The IMF forecasts until the year 2023 are used for deals of the impairment stage 2. Starting from the year 2024 a convergence to the long-term GDP average is modelled.

The expected credit losses of impairment stage 3 are determined on the basis of individual cash flows with several probability-weighted scenarios. The amount of risk provision equals the difference between the carrying amount of the asset and the present value of the expected future cash flows. The latter is calculated on the basis of the initial effective interest rate. The expected future cash flows take into account the marketability of collaterals for example charges on the land/mortgages. The interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset.

A financial asset has to be written-off by using the existing booked impairment if a recovery is not feasible based on adequate judgement. This is generally the case if in the process of a realization of the collateral a residual claim remains and if it is foreseeable that no further amounts are expected from the borrower (for example due to insolvency/lack of funds). pbb groups attempts to collect the remaining claim completely or at least partly by enforcement activities for written-off loans in justified exceptions.

According to IAS 39 which were relevant for the comparative figures 2017 pbb Group had to assess for all financial assets which were not measured at fair value through profit or loss whether there was objective evidence for impairment. The criteria used to determine if there was such objective evidence were especially:

- > significant financial difficulties of the borrower
- > overdue contractual payments of either principal or interest or other breaches of contract
- > increased probability that the borrower will enter bankruptcy or other financial reorganisation
- > renegotiations due to economic problems
- > a decline in the fair value of a financial asset below its (amortised) cost

Two types of allowances were distinguished:

- > Specific allowances: The extent of any impairment was calculated as the difference between the carrying amount and the present value of the cash flows expected in future.
- > Portfolio-based allowances: Financial assets not measured at fair value through profit or loss for which no specific allowances were booked were grouped to risk inherent portfolios according to IAS 39.64. Portfolio-based allowances were calculated using risk parameters which are compliant with Basel III, such as probability of default (PD) and loss given default (LGD). The resultant expected loss in relation to a time horizon of one year is scaled using an IFRS-compliant conversion factor to the period which on average is required for identifying the impairment event in the pbb. If differences are identified between long-term average values for the parameters PD and LGD on the one hand and the current figures on the other as a result of the market environment in some portfolios of the operating segments, these were taken into consideration accordingly.

### Hedge Accounting

With the new regulations in hedge accounting, accounting for hedging relationships will be more closely tied to the economic risk management of a company. As long as regulations on accounting for macro hedges have not yet been adopted, the IASB provides the possibility by an option to apply the former rules pursuant to IAS 39. For hedge accounting pbb Group exercised the accounting option and retains the current regulation of IAS 39. The accounting of hedge relationships is shown in the section "Notes to Derivative Transactions and Hedged Items".

### Disclosure/Notes

IFRS 7 (Financial Instruments: Disclosures) has been amended as part of the introduction of IFRS 9. In particular, this comprises amendments to disclosure requirements regarding information about the significance of financial instruments for an entity's financial position and performance as well as the nature and extent of risks arising from financial instruments.

Impairments on financial assets of the measurement category amortised cost are disclosed in the statement of financial position under "credit loss allowances on financial assets at amortised cost" instead of a deduction of the book value of the asset. Impairments on financial asset of the measurement category at fair value through other comprehensive income are shown in the equity component "accumulated other comprehensive income".

IFRS 7 and IFRS 13 required disclosures according to classes of financial instruments. pbb Group mainly defined the measurement categories according to IFRS 9– sub divided in the products loans and advances and debt securities as well as liabilities to other banks, liabilities to customers, bearer bonds and subordinated liabilities – irrevocable loan commitments, financial guarantees, hedging derivatives and cash reserve as well as claims from finance lease agreements.

Specific disclosures required by IFRS 7 are shown in the risk and opportunity report for example about credit risk, market risk and liquidity risk.

## Reconciliation from the Statement of Financial Position as of 31 December 2017 to the Statement of Financial Position as of 1 January 2018

The following tables show the reconciliations from the statements of financial positions according to IAS 39 as of 31 December 2017 to the statement of financial positions as of 1 January 2018 according to IFRS 9 pursuant to IFRS 7.42A.

### Changes in classification of financial assets and liabilities

in € million	IAS 39 carrying amounts 31.12.2017			IFRS 9 carrying amounts by measurement categories				Changes in carrying amounts due to transfer into IFRS 9 measurement categories via Reclassification 1.1.2018		
	Carrying amounts	Credit loss allowances included in carrying amounts	Gross carrying amounts	AC	FVPL	FVOCI	Revaluation due to formerly reclassified deals 1.1.2018	AC	FVPL	FVOCI
<b>Loans and advances to other banks</b>	<b>2,415</b>	<b>-</b>	<b>2,415</b>	<b>2,400</b>	<b>-</b>	<b>17</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>
LaR	2,415	-	2,415	2,400	-	17	-	-	-	2
LaR to FVOCI	15	-	15	-	-	17	-	-	-	2
LaR to AC	2,400	-	2,400	2,400	-	-	-	-	-	-
<b>Loans and advances to customers</b>	<b>40,274</b>	<b>-</b>	<b>40,274</b>	<b>39,360</b>	<b>529</b>	<b>430</b>	<b>-</b>	<b>-3</b>	<b>-14</b>	<b>62</b>
LaR	40,052	-	40,052	39,138	529	430	-	-3	-14	62
LaR to FVPL	543	-	543	-	529	-	-	-	-14	-
LaR to FVOCI	368	-	368	-	-	430	-	-	-	62
LaR to AC	39,141	-	39,141	39,138	-	-	-	-3	-	-
Leasing <sup>1)</sup>	222	-	222	222	-	-	-	-	-	-
<b>Financial investments</b>	<b>10,625</b>	<b>-13</b>	<b>10,638</b>	<b>8,667</b>	<b>336</b>	<b>1,735</b>	<b>4</b>	<b>72</b>	<b>6</b>	<b>22</b>
AfS	2,385	-	2,385	1,706	3	743	-	68	-	-1
AfS to FVPL	3	-	3	-	3	-	-	-	-	-
AfS to FVOCI	744	-	744	-	-	743	-	-	-	-1
AfS to AC	1,638	-	1,638	1,706	-	-	-	68	-	-
LaR	8,240	-13	8,253	6,961	333	992	4	4	6	23
LaR to FVPL	327	-	327	-	333	-	-	-	6	-
LaR to FVOCI	969	-	969	-	-	992	-	-	-	23
LaR to AC	6,944	-13	6,957	6,961	-	-	4	4	-	-
<b>Trading assets</b>	<b>870</b>	<b>-</b>	<b>870</b>	<b>-</b>	<b>870</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
HfT	870	-	870	-	870	-	-	-	-	-
<b>Other assets</b>	<b>2,678</b>	<b>-</b>	<b>2,678</b>	<b>-</b>	<b>2,678</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
HfT	2,678	-	2,678	-	2,678	-	-	-	-	-
<b>Liabilities to other banks</b>	<b>3,280</b>	<b>-</b>	<b>3,280</b>	<b>3,280</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Liabilities to customers</b>	<b>8,275</b>	<b>-</b>	<b>8,275</b>	<b>8,275</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Securitised liabilities</b>	<b>38,362</b>	<b>-</b>	<b>38,362</b>	<b>38,362</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subordinated liabilities</b>	<b>1,002</b>	<b>-</b>	<b>1,002</b>	<b>1,002</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Trading liabilities</b>	<b>956</b>	<b>-</b>	<b>956</b>	<b>-</b>	<b>1,040</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>84</b>	<b>-</b>
HfT	956	-	956	-	1,040	-	-	-	84	-
<b>Other liabilities</b>	<b>2,889</b>	<b>-</b>	<b>2,889</b>	<b>-</b>	<b>2,805</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-84</b>	<b>-</b>
HfT	2,889	-	2,889	-	2,805	-	-	-	-84	-

<sup>1)</sup> Claims from finance lease agreements under IAS 17.

The impairments on loans and advances to other banks and customers were reported gross, whereas impairments on debt securities were deducted from the book value and therefor shown on a net basis in the old structure. In the new structure impairments on all financial assets at amortised cost (loans and advances as well a debt securities) are reported on a gross basis.

### Reconciliation of credit loss allowances on financial assets under IAS 39 and provisions under IAS 37 at 31 December 2017 to credit loss allowances on financial assets under IFRS 9 at 1 January 2018

in € million	Credit loss allowances under IFRS 9 at 1.1.2018							Impact on credit loss allowances from changing to IFRS 9 measurement categories at 1.1.2018
	Changes in measurement category (Presentation: IAS 39 to IFRS 9 category)	Credit loss allowances under IAS 39/ IAS 37 provisions at 31.12.2017	Individual allowances	Portfolio-based allowances	Stage 1	Stage 2	Stage 3	
<b>Loans and advances to other banks</b>	-	-	-	-	-	-	-	-
LaR to AC	-	-	-	-	-	-	-	-
LaR to FVOCI	-	-	-	-	-	-	-	-
LaR to FVPL	-	-	-	-	-	-	-	-
<b>Loans and advances to customers</b>	<b>69</b>	<b>24</b>	<b>45</b>	<b>11</b>	<b>43</b>	<b>39</b>	<b>24</b>	
LaR to AC	60	15	45	11	43	39	33	
LaR to FVOCI	-	-	-	-	-	-	-	
LaR to FVPL	9	9	-	-	-	-	-9	
<b>Financial investments</b>	<b>13</b>	<b>-</b>	<b>13</b>	<b>1</b>	<b>10</b>	<b>-</b>	<b>-2</b>	
AfS to FVOCI	-	-	-	-	-	-	-	
AfS to AC	-	-	-	-	-	-	-	
LaR to AC	12	-	12	1	9	-	-2	
LaR to FVOCI	1	-	1	-	1	-	-	
LaR to FVPL	-	-	-	-	-	-	-	
<b>Trading assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
HfT to FVOCI	-	-	-	-	-	-	-	
<b>Contingent liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Irrevocable loan commitments</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-1</b>	

### Impacts from reclassifying financial assets and liabilities measured at fair value under IAS 39 (IFRS 7.42M)

in € million	Results (from FV changes) without reclassification 1.1.-31.12.2018		
Assets and liabilities reclassified out of IAS 39 fair value measurement categories	Fair value at 31.12.2018	Income statement	Accumulated other comprehensive income
<b>Reclassified in amortised cost (in the course of IFRS 9 adoption) out of:</b>			
<b>Financial investments</b>			
AfS	1,567	-	-59



## 8 Leases

In accordance with IAS 17, a lease is an agreement whereby the lessor conveys to the lessee in return for a payment the right to use an asset for an agreed period. Lease agreements have to be classified as either finance leases or operating leases. A lease is classified as an operating lease if substantially all the risks and rewards incidental to ownership of the leased asset remain with the lessor. In contrast, a lease is classified as a finance lease if substantially all risks and rewards incidental to ownership are transferred to the lessee.

### pbb Group as a Lessor

**Operating Lease** In the case of operating leases, the assets leased to the lessee are attributed to the lessor who has to continue to account for the leased assets. pbb Group does not hold any assets under operating leases as lessor.

**Finance Lease** In the case of finance leases, the lessor has to recognise a receivable from the lessee as an asset. This receivable is measured at the amount of the net investment in the lease at inception of the lease. The received lease payments are divided into an interest portion, which is recognised in profit or loss, and a principal portion. Interest income is recognised over the lease term, generally based on a pattern reflecting a constant periodic rate of return on the net investment in the lease; the principal portion (being redemption of principal) reduces the outstanding receivable.

### pbb Group as a Lessee

**Operating Lease** The lease instalments paid by the lessee in the context of operating leases are recognised as an expense over the lease term and reported as other operating expenses, or administrative expenses if the payments refer to rental expenses. The rental term commences as soon as the lessee starts to control the actual use of the leased asset. The corresponding leased assets are not recognised as an asset by the lessee. pbb Group mainly has land and building as an operating lessee.

**Finance Lease** In the case of finance leases, the lessee recognises the leased assets in its statement of financial position. pbb Group does not hold any assets under finance leases as lessee.

## 9 Cash Reserve

Cash reserve contains balances with central banks which are measured at cost.

## 10 Financial Assets at Fair Value through Profit or Loss

The financial assets at fair value through profit or loss consist of positive fair values of stand-alone derivatives and the following non-derivative financial assets:

- > Loans and advances, debt securities, shares in investment funds and in entities which are not measured at-equity due to their immateriality which do not fulfil the contractual cash flow criterion.
- > Parts of financial assets, for which there is an intention to syndicate.

Financial assets of this balance sheet position are measured at fair value. Changes of the fair value within a period affect profit or loss in the line item net income from fair value measurement of the income statement. The payments and amortisation of interests from this position are shown in net interest income.

### 11 Financial Assets at Fair Value through Other Comprehensive Income

The position financial assets at fair value through other comprehensive income consists of loans and advances as well as securities of the measurement category at fair value through other comprehensive income. These are non-derivative financial assets which fulfil the contractual cash flow criterion of IFRS 9 and which are held within a business model whose objective is achieved by both collecting cash flows and selling financial assets. Parts of the debt securities and loans and advances of the Value Portfolio and Consolidation & Adjustment fulfil these criteria at pbb Group.

Financial assets of this balance sheet position are measured at fair value. Changes of the fair value within a period are shown in accumulated other comprehensive income of equity without affecting profit or loss. The payments and amortisation of interests from these positions are shown in net interest income. Impairments of all three stages according to IFRS 9 are shown in net income from risk provisioning of the income statement and in accumulated other comprehensive income in the statement of financial position. Gains or losses from derecognition of financial assets measured at fair value through other comprehensive income are shown in net income from realisations.

### 12 Financial Assets at Amortised Cost after Credit Loss Allowances

The position financial assets at amortised cost after credit loss allowances contains loans and advances as well as securities of the measurement category at amortised cost. These are non-derivative financial assets which fulfil the contractual cash flow criterion of IFRS 9 and which are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows. Debt securities and loans and advances of the segments Real Estate Finance, Public Investment Finance and parts of the Value Portfolio and of Consolidation & Adjustments fulfil these criteria at pbb Group.

Financial assets of this balance sheet position are measured at amortised cost. Interest income and expenses from this position is shown in net interest income. Impairments of all three stages according to IFRS 9 are shown in net income from risk provisioning of income statement. The assets are shown before and after impairments in the income of financial position. Gains or losses from derecognition of financial assets measured at fair value through other comprehensive income are shown in net income from realisations.

### 13 Positive Fair Values of Hedge Accounting Derivatives

The position positive fair values of hedge accounting derivatives contains the fair value of derivatives which are subject to hedge accounting and which are positive. As pbb Group does not designate derivatives in cash flow hedge accounting anymore the position only includes derivatives of the micro fair value hedge accounting and of the portfolio hedge of interest rate risks. These derivatives are measured at fair value. Changes of the fair value within a period affect profit or loss and are disclosed in the position net income from hedge accounting in the income statement. The interest payments and amortisations of these positions are shown in net interest income.

### 14 Valuation Adjustment from Portfolio Hedge Accounting (Assets)

The position valuation adjustment from portfolio hedge accounting (assets) contains the fair values subject to the hedged risks in the hedged cash flows of the portfolios of hedged items on the asset side. In the context of portfolio hedge accounting interest rate risks from loans and advances as well as from liabilities are hedged on a portfolio basis.

### 15 Tangible Assets

Tangible assets are generally measured at cost of purchase or cost of production. The carrying amounts (except land) are depreciated on a straight-line basis in accordance with the expected useful lives of the assets. In addition, tangible assets are tested at least annually for impairment. If the value of tangible assets has impaired, an impairment loss is recognised in profit or loss. If the reasons for the impairment no longer exist, an amount not exceeding amortised cost or cost of production is reversed through profit or loss. For fixtures in rental buildings calculations are based on the term of the contract, taking into account any extensions options if this term is shorter than the normal useful economic life.

#### Useful lives

Fixture in rental buildings	5–15 years
IT equipment (broad sense)	3–5 years
Other operating equipment	3–25 years

Subsequent cost of purchase or costs of conversion are capitalised if an additional economic benefit is generated for the Company. Maintenance expenses of tangible assets are recognised in profit or loss of the financial year in which they arose.

## 16 Intangible Assets

Purchased and internally generated software are the main items recognised as intangible assets. Goodwill, brand names and customer relations are not capitalised.

Software is an intangible asset with a finite useful life. Purchased software is measured at the amortised purchase cost. pbb Group capitalises internally generated software if it is probable that future economic benefits is generated for the Group and the expenses can be measured reliably. Expenses eligible for the capitalisation of internally generated software include external, directly attributable costs of materials and services as well as personnel expenses for employees directly associated with the creation of software used by the Company. Software is amortised on a straight-line basis over expected useful lives of three to five years. In addition, intangible assets with a finite useful life are tested for impairment annually or whenever there is an indication that the intangible asset may be impaired or its useful life has reduced.

## 17 Other Assets

Other assets mainly comprise the collaterals pledged for the banking levy. The collaterals are accounted for at amortised cost.

## 18 Financial Liabilities at Fair Value through Profit or Loss

The financial liabilities at fair value through profit or loss contain the negative fair values of stand-alone derivatives. Financial liabilities of this balance sheet position are measured at fair value. Changes of the fair value within a period affect profit or loss in the line item net income from fair value measurement of the income statement. The payments and amortisation of interests from this position are shown in net interest income.

## 19 Financial Liabilities at Amortised Cost

The position financial liabilities at amortised cost consists of all non-derivative financial liabilities. Financial liabilities of this balance sheet position are measured at amortised cost. Interest income and expenses from this position is shown in net interest income. Gains or losses from derecognition of financial liabilities measured at amortised cost are shown in net income from realisations. Such derecognitions may result from prepayments of borrowers.

Amongst others the position financial liabilities at amortised cost contains subordinated liabilities. In the event of insolvency or liquidation subordinated liabilities may only be repaid after all non-subordinated creditors have been satisfied. For some instruments of subordinated liabilities the holders participate in any net loss or inappropriate retained earnings. In addition, the interest entitlement can be ceased or reduced under specific conditions. For other instruments the interest payment ceases only in case of a net loss respectively inappropriate retained earnings which can be recovered depending on the structuring.

Pursuant to IAS 32 the subordinated capital instruments issued by companies of pbb Group were classified as financial liabilities or equity instruments in accordance with the substance of the contractual arrangement and the definitions of a financial liability and an equity instrument.

## 20 Negative Fair Values of Hedge Accounting Derivatives

The position negative fair values of hedge accounting derivatives contains the fair value of derivatives which are subject to hedge accounting and which are negative. As pbb Group does not designate derivatives in cash flow hedge accounting anymore the position only includes derivatives of the micro fair value hedge accounting and of the portfolio hedge of interest rate risks. These derivatives are measured at fair value. Changes of the fair value within a period affect profit or loss and are disclosed in the position net income from hedge accounting in the income statement. The interest payments and amortisations of these positions are shown in net interest income.

## 21 Valuation Adjustment from Portfolio Hedge Accounting (Liabilities)

The position valuation adjustment from portfolio hedge accounting (liabilities) contains the fair values subject to the hedged risks in the hedged cash flows of the portfolios of hedged items of the liability side. In the context of portfolio hedge accounting interest rate risks from loans and advances as well as from liabilities are hedged on a portfolio basis.

## 22 Provisions

A provision is a liability of uncertain timing or amount. A provision shall be recognised when an entity has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. According to IAS 37.15 in rare cases it is not clear whether there is a present obligation. In these cases a past event is deemed to give rise to a present obligation if, taking into account of all available evidence, it is more likely than not that a present obligation exists at the end of the reporting period. In rare cases, for example in a law suit, it may be disputed whether certain events have occurred or whether those events result in a present obligation. In such a case, pbb determines whether a present obligation exists at the end of the reporting period by taking into account all available evidence, including, for example, the opinion of experts.

Under IAS 37.36 et seq., the best estimate is used for measuring provisions for contingent liabilities and contingent losses attributable to pending transactions. Long-term provisions are generally discounted with an interest rate that reflects the current assessments of the time value of money and the risks specific to the liability.

Provisions for commitments and guarantees given are booked on the basis of impairment rules of IFRS 9 and disclosed under provisions.

Provisions for defined benefit plans are calculated on the basis of actuarial reports in accordance with IAS 19. They are measured using the projected unit credit method. The amount of the provision equals the so-called net defined benefit liability which is the difference between the present value of the defined benefit obligation and the fair value of plan assets. pbb has concluded plan assets in the form of a qualifying insurance policy to hedge parts of the risk from the defined benefit obligations. The reinsurance is pledged to the plan beneficiaries.

The determination of the net defined benefit liability is based on demographic and financial actuarial assumptions. A demographic assumption for example is the mortality for which pbb uses guidance tables. For financial actuarial assumptions the discount rate has the greatest effect on the amount of defined benefit liability. The interest rate used for the measurement is determined by reference to market yields at the end of the reporting period on high-quality, fixed-interest corporate bonds.

Net interest on the defined benefit liability is determined by multiplying the defined benefit liability with the discount rate. The determination is done at the beginning of the financial year taking into account any changes in the net defined benefit liability as a result of contribution and benefit payments during the period. Net interest on defined benefit liability are shown together with all other effects on income statement from the defined benefit obligations and the plan assets in the position pension expenses and related employee benefit costs in general and administrative expenses.

Remeasurements of the net defined benefit liability result from actuarial gains and losses and the return on plan assets excluding amounts included in net interest on the net defined benefit liability. Remeasurements of the net defined benefit liability are shown in equity in the position profit/losses from pension obligations. Changes of remeasurements of the net defined benefit liability within a period are shown as a component of the statement of comprehensive income. Actuarial gains and losses result from increases or decreases in the present value of the defined benefit obligation due to changes of actuarial assumptions and experience adjustments. Changes of the discount rate usually have the biggest effect on the actuarial gains and losses.

Along with other German financial institutions, pbb Group is a member of the pension fund BVV Versorgungskasse des Bankgewerbes e.V. ("BVV"). Both pbb Group as an employer and the eligible employees make regular contributions to the BVV pension schemes. BVV insurance tariffs are calculated and designed to provide fixed pension payments, plus profit participations. Every BVV member entity has a subsidiary responsibility for the pension claims of its eligible employees. pbb Group classifies the BVV pension scheme as a defined benefit plan, but discloses it as a defined contribution plan for accounting purposes because the information available is not sufficient to recognise it as a defined benefit plan. pbb Group considers the risk of becoming liable to pension obligations due to its subsidiary responsibility as very remote, and does not recognise any provisions in this respect.

## 23 Other Liabilities

Accruals are the most material position in other liabilities. This also includes short-term liabilities to employees, for instance flexitime credits and vacation entitlements. The accrued liabilities are recognised at the amount likely to be utilised. If the obligations listed at this note cannot be quantified precisely on the balance sheet date and if the criteria specified in IAS 37 for recognising provisions are satisfied, these items have to be disclosed as provisions.

## 24 Equity

The equity includes the equity attributable to the shareholders and the additional equity instruments (AT1 capital). The equity attributable to the shareholders consists of the subscribed capital, additional paid-in capital, retained earnings, consolidated profit and accumulated other comprehensive income. The accumulated other comprehensive income contains the reserves for remeasurements of defined benefit commitments (gains/losses from pension obligations), for cash flow hedge accounting and for financial assets at fair value through other comprehensive income (FVOCI).

The AT1 capital is classified as equity since there is neither an obligation to repay the capital nor is there an obligation for ongoing debt service. The transaction costs directly attributable to the issue of the AT 1 capital and paid coupons are deducted directly from equity.

## 25 Share-based Payment

pbb Group has awarded share-based remuneration with cash settlement to board members and specific staff members since the financial year 2016. According to the conditions of the remuneration system the variable compensation is economically affected by the price development of the pbb share in the scope of the sustainability component. The payment structure is split into a payment part and a so called deferral part which is supposed to establish a multi-year basis of assessment and to orientate the variable component of these persons to the long term success of the company. The period of deferment for the deferral part amounts to three respectively five years depending on the agreements. The concept of the share based remuneration system is described in detail in the remuneration report. The extent of the share-based payments is disclosed in the note "related parties disclosures".

## 26 Currency Translation

Currency translation is carried out in accordance with the regulations of IAS 21. On the balance sheet date, monetary items in a foreign currency are translated into the functional currency. The reporting currency is Euro. Non-monetary items which were stated in a foreign currency using historical cost of purchase are measured using the exchange rate applicable at date of purchase.

Income and expenses attributable to currency translation of the affiliated companies' single financial statements into the functional currency are generally recognised in profit or loss in net other operating income/expenses.

Starting from 1 January 2018 the functional currencies of the branches in London and Stockholm changed from British Pounds respectively Swedish Krona to Euro due to the centralisation of material functions in Unterschleissheim. There have not been material effects from the change of the functional currency. After this, all entities of the Group have Euro as the functional currency. The group of consolidated companies does not include any companies from hyperinflationary countries.

## 27 Income Taxes

Income taxes are accounted for and measured in accordance with IAS 12. Apart from the exceptions defined in the standard, deferred taxes are calculated for all temporary differences between the IFRS values and the tax values as well as for the differences resulting from uniform Group measurement principles and differences from the consolidation (balance sheet method). Deferred tax assets arising from non-utilised losses carried forward, interest assets carried forward and tax credits are recognised if required in accordance with IAS 12.34 et seq. and not opposed by a change in tax status in accordance with SIC-25.

Deferred taxes are calculated using the national tax rates which are expected at the time the differences are settled, as the concept of deferred taxes is based on the presentation of future tax assets or tax liabilities (liability method). Changes in tax rates have been taken into account.

## 28 Non-current Assets Held for Sale

In accordance with IFRS 5, a non-current asset or disposal group must be classified as held for sale if the related carrying amount is primarily realised by a disposal transaction and not by continued use. To reclassify an asset as held for sale, certain conditions must be met on a cumulative basis. Above all, there must be a specific intention to sell, the asset must be immediately available and the disposal must be highly probable. As at 31 December 2018 and at 31 December 2017 pbb Group did not own any assets held for sale.

## 29 Judgements and estimations

When preparing the financial statements, pbb Group makes future-related judgements as well as estimations, which may carry a considerable risk of a major change to the disclosed assets and liabilities becoming necessary during the next financial year. The assumptions and parameters underlying the estimates to be made are based on the exercise of appropriate judgement.



**Going-Concern**

The Consolidated Financial Statements of pbb are based on the judgement of going-concern. The conditions of going-concern are described in the report on expected developments.

**Classification of Financial Instruments**

For measurement purposes the financial assets have to be classified into the three measurement categories at fair value through profit or loss, at fair value through other comprehensive income and at amortised cost. The classification depends on the business model criterion and the contractual cash flow criterion. The assessment of this classification is based on judgements which are described in the note "Financial Instruments". For example, this relates to the judgement of the intention to hold the financial assets in future for the business model criterion or the assessment of the contractual regulation for the financial assets.

**Allowances**

pbb shall recognise a loss allowance for expected credit losses on a financial asset that is measured at amortised cost or at fair value through other comprehensive income, a lease receivable or specific loan commitments and financial guarantee contracts. For this reasonable and supportable information, including forward-looking information, have to be taken into account.

Expected credit losses are a probability-weighted estimate of credit losses, i.e. the present value of expected cash shortfalls, over the expected life of the financial instrument. A cash shortfall is the difference between the cash flows that are due to an entity in accordance with the contract and the cash flows that entity is expected to receive. Upon initial recognition, the impairments in lending business are based on expected credit losses for twelve months (so-called stage 1). The 12-month expected credit loss is that part of the lifetime expected credit losses, which is equal to the expected credit losses from defaults that may occur for the financial instrument within twelve months after balance sheet date. In case of a significant increase in the financial asset's credit risk within the context of subsequent measurement (stage 2) or in case of a credit impairment (stage 3), the impairment has to reflect the lifetime expected credit losses.

The methods and judgements, including forward-looking information, for the determination of a change of an impairment stage and estimation of the amount of impairment are reviewed at least annually.

**Fair Values of Original and Derivative Financial Instruments**

The fair value of financial instruments that are not listed on active markets is measured using valuation models. In such cases, a check is performed regularly to assess whether the valuation models provide a comparable benchmark for current market prices. The valuation models can only take into account quantifiable factors (e.g. cash flows and discount rates) that also require estimates. Changes in estimations of these factors might have an impact on the fair values of the financial instruments.

### Hedge Accounting

Relations between hedged items and hedging instruments can be presented in hedge accounting. A relationship only qualifies for hedge accounting when certain conditions specified under IAS 39.88 are satisfied. Amongst others the hedge has to be very efficient with regard to achieving compensation for the risks resulting from changes in the fair value or the cash flow in relation to the hedged risk.

The determination of the effectiveness of the risk hedge depends on risk measuring methods, the parameters which are used and estimations relating to the probability of occurrence. These methods and parameters are continuously developed in line with the risk management objectives and strategies.

### Intangible Assets and Tangible Assets

pbb Group's accounting for intangible assets and tangible assets are subject to estimation uncertainties, particularly in the determination of the useful life of assets and the associated amount of depreciation/amortisation recognised per period.

### Provisions

Estimates are used in the measurement of provisions at pbb Group. Estimation uncertainties arise in particular during assessment of the amount of the future cash outflows, the time horizon and the discount rate.

### Income Taxes

pbb Group is subject to a wide range of national tax regulations with regard to the calculation of income taxes. In order to measure the tax expenses, it is necessary to make estimates that are calculated with the existing knowledge as of the balance sheet date and closely related to the tax return prepared in the following financial year. In some countries, the current tax charges attributable to the current financial year can only be definitely finalised after the corresponding tax audit has been completed. The variances with regard to the estimated tax burden may have a positive or negative influence on the tax burden in future financial years.

With regard to the capitalisation of losses carried forward and other tax credits, the extent as well as the actual availability of such tax benefits are subject to estimation. Major losses carried forward are subject to national German tax law, and their availability depends inter alia on the restrictions set out in Sections 10 d EStG, 8 c KStG as well as Section 10 a GewStG. Restrictions based on a change in the tax status (SIC-25) as a result of the privatisation performed in 2015 did not occur as of the balance sheet date. Deferred tax assets arising from losses carried forward are therefore recognised to the extent as it is likely that future taxable income will be available to offset the non-utilised tax losses carried forward.

The reassessment of tax provisions due to a new interpretation of a tax treatment of a non interest bearing liability a tax resulted in a tax expense of €34 million.

### Consolidation

Companies and structured entities must be consolidated if pbb has direct or indirect control over them. Control is deemed to exist if pbb has decision-making powers to manage relevant activities, has a right to significant returns from the subsidiary and can use its decision-making powers to influence the amount of the significant variable returns. The level of control is assessed on the basis of contractual and economic relationships to the company or the structured entity. The assessment whether pbb exerts control or substantial influence over the company may result in judgement leeway.

## SEGMENT REPORTING

### 30 Notes to Segment Reporting by Operating Segment

Segment reporting for the 2018 financial year was prepared in accordance with IFRS 8 Operating Segments. In line with the Management Approach under IFRS 8, segment reporting discloses segment-specific, management-relevant financial information that is also regularly used by Management Board (Chief Operating Decision Maker) when deciding on the allocation of resources, and for assessing the earnings power of segments. Based on the organisational structure of pbb Group, which is aligned to the various products and services offered, three business segments have been determined in line with internal management reporting.

Within segment reporting, income is determined by deducting matched-maturity funding rates prevailing at the time of concluding a transaction from the interest rate charged to the client. The input parameters required for this purpose are set at the time of originating a new business transaction, within the scope of accounting for individual transactions. In addition, income from investing the Bank's own funds is included at segment level. The allocation of liquidity costs to the operating segments is based on the transfer price mechanism for the individual transaction.

Further income or expenses that cannot be allocated directly to a specific lending transaction (in particular, the results from disposal of assets held for liquidity management, from market-induced effects on net income from fair value measurement, hedging relationships, and the bank levy) are allocated to the business segments, usually on a pro-rata basis, in line with financing volumes.

The allocation of general and administrative expenses to the operating segments differentiates between expenses which can be directly attributed and those which are not directly attributable. Expenses (of the sales units, for example) which are directly attributable can be clearly assigned to the segments via the cost centre. Expenses (of the central units, for example) which are not directly attributable are assigned to the segments' cost centres via well-defined allocation models. Net income from restructuring is allocated to the segments using the same ratio as the administrative expenses.

Segment risk-weighted assets (RWA) are determined in accordance with the allocation of individual transactions (credit risk, for example) and with the allocated risk types (operational risks, for example). Risk types which are not directly attributable are assigned to the segments in accordance with defined allocation models.

Equity, excluding accumulated other comprehensive income from cash flow hedge accounting and from financial assets measured at fair value through other comprehensive income (IAS 39: AfS reserve) as well as excluding Additional Tier 1 (AT1) capital, is fully allocated to the segments and the Consolidation & Adjustments (C&A) reconciliation column without the disclosure of excess capital. The allocation of equity to the operating segments and C&A follows a proportionate approach and is therefore consistent with the distribution of diversified economic capital within risk management (going-concern approach). In addition, the allocation takes into account the effects of changed risk parameters from the harmonisation of risk models.

#### Real Estate Finance (REF)

The REF operating segment comprises financing for professional real estate investors. These include professional national and international real estate companies, institutional investors, property funds as well as, above all in Germany, customers with a regional focus. Financed properties mainly involve office buildings, properties for residential use, retail and logistics properties as well as (business) hotels.

**Public Investment Finance (PIF)**

The PIF business segment comprises financing eligible for covered bonds aimed at the provision and improvement of public infrastructure. Customers in this segment include, amongst others, regions, provinces, municipalities, urban development companies, public hospitals, investment or real estate companies. Moreover, the Group is active in long-term publicly guaranteed export financings hedged by public export-credit insurers. Bond purchases, above all for cover assets pool and liquidity management, are also part of this segment.

**Value Portfolio (VP)**

The Value Portfolio (VP) operating segment comprises non-strategic portfolios and activities of pbb Group. The VP consists almost entirely of existing financings to the public sector which are not linked to specific projects (budget financing).

**Consolidation & Adjustments (C&A)** reconciles the aggregated segment results with the consolidated result. The column also includes income from the investment of allocated equity.

**31 Income Statement by Operating Segment****Income/expenses**

in € million		REF	PIF	VP	C&A	pbb Group
Operating income	2018	391	38	37	5	<b>471</b>
	2017 <sup>1)</sup>	368	26	53	6	<b>453</b>
Net interest income	2018	372	34	39	5	<b>450</b>
	2017 <sup>1)</sup>	334	30	37	6	<b>407</b>
Net fee and commission income	2018	6	1	-1	-	<b>6</b>
	2017 <sup>1)</sup>	9	-	-1	-	<b>8</b>
Net income from fair value measurement	2018	-8	-2	1	-	<b>-9</b>
	2017 <sup>1)</sup>	-	-2	-3	-	<b>-5</b>
Net income from realisations	2018	27	5	-	-	<b>32</b>
	2017 <sup>1)</sup>	45	-	-	-	<b>45</b>
Net income from hedge accounting	2018	-1	-	-	-	<b>-1</b>
	2017 <sup>1)</sup>	-1	-	-	-	<b>-1</b>
Net other operating income	2018	-5	-	-2	-	<b>-7</b>
	2017 <sup>1)</sup>	-19	-2	20	-	<b>-1</b>
Net income from risk provisioning	2018	-22	4	4	-	<b>-14</b>
	2017 <sup>1)</sup>	-8	-6	4	-	<b>-10</b>
General and administrative expenses	2018	-154	-27	-12	-	<b>-193</b>
	2017 <sup>1)</sup>	-158	-27	-14	-	<b>-199</b>
Expenses from bank levies and similar dues	2018	-14	-4	-7	-	<b>-25</b>
	2017 <sup>1)</sup>	-15	-4	-9	-	<b>-28</b>
Net income from write-downs and write-ups of non-financial assets	2018	-12	-2	-1	-	<b>-15</b>
	2017 <sup>1)</sup>	-12	-1	-1	-	<b>-14</b>
Net income from restructuring	2018	-7	-1	-1	-	<b>-9</b>
	2017 <sup>1)</sup>	2	-	-	-	<b>2</b>
<b>Profit or loss before tax</b>	<b>2018</b>	<b>182</b>	<b>8</b>	<b>20</b>	<b>5</b>	<b>215</b>
	<b>2017<sup>1)</sup></b>	<b>177</b>	<b>-12</b>	<b>33</b>	<b>6</b>	<b>204</b>

<sup>1)</sup> Adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

### Cost-income ratio<sup>1)</sup>

in %		REF	PIF	VP	pbb Group
Cost-income ratio	2018	42.5	76.3	35.1	<b>44.2</b>
	2017	46.2	>100.0	28.3	<b>47.0</b>

<sup>1)</sup> Cost-income ratio is the ratio of general and administrative expenses and net income from write-downs and write-ups on non-financial assets to operating income.

## 32 Balance-sheet-related Measures by Operating Segment

The Management Board controls balance-sheet-related measures by operating segments based on financing volumes, on risk-weighted assets and on equity.

### Balance-sheet-related measures by operating segment

in € billion		REF	PIF	VP	C&A	pbb Group
Financing volumes <sup>1)</sup>	31.12.2018	26.8	6.4	13.2	–	<b>46.4</b>
	31.12.2017	24.9	7.0	13.8	–	<b>45.7</b>
Risk-weighted assets <sup>2)</sup>	31.12.2018	8.3	1.4	4.0	0.9	<b>14.6</b>
	31.12.2017	8.3	1.6	3.5	1.1	<b>14.5</b>
Equity <sup>3)</sup>	31.12.2018	1.4	0.1	1.1	0.3	<b>2.9</b>
	31.12.2017 <sup>4)</sup>	1.2	0.2	1.1	0.4	<b>2.9</b>

<sup>1)</sup> Notional amounts of the drawn parts of granted loans and parts of the securities portfolio.

<sup>2)</sup> Including risk-weighted credit risk positions as well as the capital requirements for market risk positions and operational risks scaled with the factor 12.5.

<sup>3)</sup> Excluding accumulated other comprehensive income (OCI) from cash flow hedge accounting, financial assets at fair value through OCI (IAS 39: AfS reserve) and AT1 capital.

<sup>4)</sup> Adjusted due to IFRS 8.29. Details are disclosed in note "Consistency".

## 33 Breakdown of Operating Income

### Operating income by products

in € million		Real estate financing	Public investment financing	Other products	pbb Group
Operating income	2018	391	38	42	<b>471</b>
	2017	368	26	59	<b>453</b>

### Operating Income by Regions

pbb Group differentiates between the regions Germany, Rest of Europe and America/Asia. Allocation of values to regions is based on the location of the registered offices of the Group companies or their branches.

### Operating income by regions

in € million		Germany	Rest of Europe	Amerika/Asia	pbb Group
Operating income	2018	415	55	1	<b>471</b>
	2017	390	64	–1	<b>453</b>

### Operating Income by Customers

There were no significant customers within the meaning of IFRS 8.34 in the financial years 2018 and 2017.

## NOTES TO THE CONSOLIDATED INCOME STATEMENT

## 34 Net Interest Income

## Net interest income

in € million	2018 (IFRS 9)	2017 (IAS 39)
Interest income	1,834	1,980
from financial assets at fair value through profit or loss	316	316
from financial assets at fair value through other comprehensive income	65	85
from financial assets at amortised cost	1,245	1,333
from hedge accounting derivatives (net) <sup>1)</sup>	210	245
from other assets	5	7
negative interest income from non-derivative financial liabilities	-7	-6
Interest expenses	-1,384	-1,573
from financial liabilities at fair value through profit or loss	-366	-365
from financial liabilities measured at amortised cost	-1,020	-1,208
from other liabilities	-	-3
positive interest expenses from non-derivative financial assets	2	3
<b>Total</b>	<b>450</b>	<b>407</b>

<sup>1)</sup> Includes positive interest expenses (net) from hedge accounting derivatives in the amount of €15 million (2017: €3 million).

## 35 Net Fee and Commission Income

## Net fee and commission income

in € million	2018 (IFRS 9)	2017 (IAS 39)
Fee and commission income	8	11
from financial assets at amortised cost and financial liabilities not at fair value through profit or loss	8	11
Other lending business	8	11
Fee and commission expenses	-2	-3
from financial assets at amortised cost and financial liabilities not at fair value through profit or loss	-2	-3
Securities and custodial services	-1	-2
Other lending business	-1	-1
<b>Total</b>	<b>6</b>	<b>8</b>

In order to meet the new disclosure requirements set out in IFRS 15, items were divided into fee and commission income and fee and commission expenses. The previous year's figures were adjusted accordingly.

Fee and commission income is recognised at a point in time when the performance obligation is satisfied, i.e. the service is provided, by pbb Group. Fee and commission income is generated in the REF segment.

### 36 Net Income from Fair Value Measurement

#### Net income from fair value measurement

in € million	2018 (IFRS 9)	2017 (IAS 39)
Net income from stand-alone derivatives	-1	-5
Interest derivatives	-1	-
Foreign currency derivatives	-	-5
Net income from other financial assets at fair value through profit or loss	-8	-
From debt instruments	-8	-
Debt securities	-15	-
Loans and advances	7	-
<b>Total</b>	<b>-9</b>	<b>-5</b>

### 37 Net Income from Realisations

#### Net income from realisations

in € million	2018 (IFRS 9)	2017 (IAS 39)
Income from derecognition of financial instruments	33	49
from financial assets at fair value through other comprehensive income	-	1
from disposal	-	1
from financial assets at amortised cost	31	46
from disposal	5	1
from early repayment	26	45
from financial liabilities measured at amortised cost	2	2
from early repayment	2	2
Expenses from derecognition of financial instruments	-1	-4
from financial assets at fair value through other comprehensive income	-1	-
from early repayment	-1	-
from financial assets at amortised cost	-	-1
from disposal	-	-1
from financial liabilities measured at amortised cost	-	-2
from early repayment	-	-2
from deconsolidation of subsidiaries	-	-1
<b>Total</b>	<b>32</b>	<b>45</b>

**38 Net Income from Hedge Accounting****Net income from hedge accounting**

in € million	2018 (IFRS 9)	2017 (IAS 39)
Net income from micro fair value hedge accounting	–	–1
from hedged items	77	106
from hedging instruments	–77	–107
Net income portfolio hedge accounting	–1	–
from hedged items	–22	–1
from hedging instruments	21	1
<b>Total</b>	<b>–1</b>	<b>–1</b>

**39 Net Other Operating Income****Net other operating income**

in € million	2018 (IFRS 9)	2017 (IAS 39)
Net income from foreign currency translation	–2	–2
Net income from provisions in non-lending business	–4	–24
Miscellaneous other operating income	–1	25
<b>Total</b>	<b>–7</b>	<b>–1</b>

**40 Net Income from Risk Provisioning****Net income from risk provisioning by stages**

in € million	2018 (IFRS 9)
From financial assets at amortised cost	–10
Stage 1	–
Stage 2	9
Stage 3	–19
Income from recoveries from written-off financial assets	1
Net additions to provisions in off balance sheet lending business	–5
<b>Total</b>	<b>–14</b>



## Net income from risk provisioning

in € million	2017 (IAS 39)
Allowances for losses on loans and advances	-7
Individual allowances	-3
Portfolio-based allowances	-4
Portfolio-based allowances on securities	-4
Income from recoveries from written-off financial assets	1
<b>Total</b>	<b>-10</b>

## 41 General and Administrative Expenses

### General and administrative expenses

in € million	2018 (IFRS 9)	2017 (IAS 39)
Personnel expenses	-114	-119
Wages and salaries	-93	-92
Social security expenses	-13	-13
Pension expenses and related employee benefit expenses	-10	-11
Other personnel expenses/income	2	-3
Non-personnel expenses	-79	-80
Office and operating expenses	-10	-10
Consulting expenses	-15	-20
IT expenses	-39	-31
Other non-personnel expenses	-15	-19
<b>Total</b>	<b>-193</b>	<b>-199</b>

## 42 Expenses from Bank Levies and Similar Dues

### Expenses from bank levies and similar dues<sup>1)</sup>

in € million	2018 (IFRS 9)	2017 (IAS 39)
Bank levies	-21	-20
Deposit protection fund	-3	-6
Compensation scheme of German banks	-1	-2
<b>Total</b>	<b>-25</b>	<b>-28</b>

<sup>1)</sup> Includes administrative expenses invoiced for the dues/levies.

### 43 Net Income from Write-downs and Write-ups of Non-financial Assets

#### Net income from write-downs and write-ups of non-financial assets

in € million	2018 (IFRS 9)	2017 (IAS 39)
Depreciation or amortisation	-14	-10
Tangible assets	-3	-2
Intangible assets	-11	-8
Impairments	-1	-4
Intangible assets	-1	-
Salvage acquisitions	-	-4
<b>Total</b>	<b>-15</b>	<b>-14</b>

### 44 Net Income from Restructuring

#### Net income from restructuring

in € million	2018 (IFRS 9)	2017 (IAS 39)
Income from reversals of restructuring provisions	-	2
Expenses from additions to restructuring provisions	-9	-
<b>Total</b>	<b>-9</b>	<b>2</b>

### 45 Income Tax

#### Breakdown

in € million	2018 (IFRS 9)	2017 (IAS 39)
Current taxes	-35	-39
Deferred taxes	-1	17
Thereof:		
Deferred taxes on losses carried forward	-83	2
<b>Total</b>	<b>-36</b>	<b>-22</b>

Current taxes include a tax expense for prior years of €4 million (2017: tax income of €8 million). The tax expenses for prior years largely comprise tax income of €28 million due to the effects from tax audits, as well as a tax expense of €34 million due to the tax treatment of a non-interest liability.

For domestic companies, the deferred taxes are calculated using the future uniform rate of corporation tax of 15.0% plus the corresponding 5.5% solidarity surcharge and the trade tax depending on the locally applicable assessment rate (the current basic rate is 3.5%). For pbb, the tax rate for the calculation of deferred taxes is 27.67% (2017: 27.67%).

The following overview shows the development of the deferred taxes recognised in the financial statements:

### Development of deferred taxes

in € million	31.12.2018 (IFRS 9)	31.12.2017 (IAS 39)
Deferred taxes recognised in the statement of financial position	86	87
Difference to prior year	-1	16
Thereof:		
Recognised in profit or loss	-1	17
OCI from pension commitments	-1	-3
OCI from financial assets at fair value through OCI (2017: offset against AfS reserve)	9	-6
OCI from Cash flow hedge accounting	8	8
Effects from initial adoption of IFRS 9	-16	-

The change in deferred taxes recognised outside profit or loss regarding accumulated other comprehensive income from pension commitments in the amount of €-1 million (2017: €-3 million) is included in deferred taxes from provisions.

The change in deferred taxes recognised outside profit or loss regarding accumulated other comprehensive income from financial assets measured at fair value through profit or loss in the amount of €9 million (2017: AfS reserve of €-6 million) is included in deferred taxes from financial assets measured at fair value through other comprehensive income.

The change in deferred taxes recognised outside profit or loss regarding accumulated other comprehensive income from cash flow hedge accounting in the amount of €8 million (2017: €8 million) is included in deferred taxes from positive/negative fair values of hedging derivatives.

### Reconciliation

in € million (unless otherwise indicated)	2018 (IFRS 9)	2017 (IAS 39)
Profit or loss before tax	215	204
Applicable (legal) tax rate in %	27.67	27.67
Expected (computed) tax expense	-59	-56
<b>Tax effects</b>		
arising from tax rate differences	-	-1
arising from tax-free income	-	-1
arising from deductible and non-deductible items	82	-15
arising from valuation adjustments and non-application of deferred taxes	-55	43
arising from prior years	-4	8
<b>Reported income taxes</b>	<b>-36</b>	<b>-22</b>
<b>Group tax ratio in %</b>	<b>16.74</b>	<b>10.78</b>

Following the precise determination on euro basis, the corporate tax rate is at 16.71% (2017: 11.13%)

The tax rate applicable for the reporting year, including solidarity surcharge, is 27.67% (2017: 27.67%) and is comprised of the 15.0% German corporate tax rate currently valid, the payable solidarity surcharge of 5.5% as well as the average trade tax rate of 11.843% (2017: 11.843%).

Foreign tax rates ranged between 19.0% and 35.6%.

The effects attributable to deductible and non-deductible items relate primarily to non-deductible expenses, which do not have to be taken into account as deferred taxes as a result of permanent differences, but which have reduced or increased the basis of taxation.

The effects arising from valuation adjustments and non-application of deferred taxes, on the one hand, comprise effects from the write down of deferred tax assets on losses carried forward and, on the other hand, opposing effects from the use of tax losses carried forward previously not accounted for.

The effects from previous years include current taxes for previous years which have been incurred as a result of tax audits or a reassessment of the tax liability.

The Group tax ratio is the quotient of the stated income taxes (current and deferred taxes) and profit or loss before tax.

The deferred tax liabilities or deferred tax assets relate to the following items:

#### Deferred tax liabilities/assets

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Financial assets at amortised cost after credit loss allowances	36	–	5
Positive fair values of hedge accounting derivatives	70	157	–
Financial liabilities at fair value through profit or loss	113	–	49
Other assets/liabilities	21	83	107
<b>Deferred tax liabilities before offsetting</b>	<b>240</b>	<b>240</b>	<b>161</b>
Offsetting	–240	–240	–161
<b>Deferred tax liabilities after offsetting</b>	<b>–</b>	<b>–</b>	<b>–</b>
Financial assets at fair value through profit or loss	46	–	44
Positive/negative fair values of hedge accounting derivatives	122	150	–
Provisions	104	36	38
Other assets/liabilities	36	24	83
Losses carried forward	18	101	83
<b>Deferred tax assets before offsetting</b>	<b>326</b>	<b>311</b>	<b>248</b>
Offsetting	–240	–240	–161
<b>Deferred tax assets after offsetting</b>	<b>86</b>	<b>71</b>	<b>87</b>

On the reporting date, there are unused tax losses carried forward totalling €3,314 million (2017: €3,550 million) at corporate tax level and €3,397 million (2017: €3,591 million) at trade tax level. Deferred tax assets have been recognised on a portion of €64 million (2017: €341 million) at corporate tax level and €64 million (2017: €241 million) at trade tax level, because the criteria for recognition in accordance with IAS 12.34 et seq. were satisfied. The impairment assessment as regards deferred tax assets on tax loss carryforwards is based on a tax planning which was derived from general corporate planning. Loss carryforwards may be applied for an unlimited period, unless in the event of a change of shareholders which is detrimental for tax purposes. An allowance of €0 million was recognised on deferred taxes from temporary differences in the financial year 2018 (2017: €0 million). Deferred tax income from the origination and reversal of temporary differences arose in the amount of €82 million (2017: deferred tax income of €15 million).

Tax rate changes did not result in major deferred tax expenses or income in the current year nor in the previous year.

The use of tax losses previously not recognised resulted in no reduction in the current income tax expense (2017: no reduction in the current income tax expense). From the origination and write-down of loss carryforwards previously recognised, deferred tax expenses arose in the amount of €83 million (2017: deferred tax income arose of €2 million).

2018 there were no differences associated with investments in subsidiaries (2017: no differences). In the prior year on differences associated with investments in subsidiaries, deferred tax liabilities have not been recognised because pbb Group has the ability and the intention to invest profits permanently in these subsidiaries.

## 46 Net Gains/Net Losses

The income statement contains the following net gains/net losses recognised in profit or loss by measurement categories:

### Net gains/net losses by measurement categories

in € million	2018 (IFRS 9)	2017 (IAS 39)
Financial assets		
at fair value through profit or loss	-9	-5
from stand-alone derivatives	-1	-5
from debt instruments	-8	-
at fair value through other comprehensive income	-1	1
at amortised cost	22	35
Financial liabilities		
at amortised cost	2	-

The net gains and losses include additions to and reversals of credit loss allowances, derecognition gains and losses as well as the fair value measurement results from financial instruments recognised in profit or loss.

## 47 Earnings Per Share

### Earnings per share

		2018 (IFRS 9)	2017 (IAS 39)
Net profit/loss attributable to the shareholders of pbb	in € million	179	182
Thereof attributable to the ordinary shareholders	in € million	167	182
Thereof attributable to the AT1 investors	in € million	12	-
Average number of ordinary shares issued	pieces	134,475,308	134,475,308
Adjusted average number of ordinary shares issued pieces	pieces	134,475,308	134,475,308
<b>Basic earnings per share</b>	in €	<b>1.24</b>	<b>1.35</b>
<b>Diluted earnings per share</b>	in €	<b>1.24</b>	<b>1.35</b>

Earnings per share are calculated in accordance with IAS 33 by dividing net income/loss attributable to the ordinary shareholders holders by weighted average number of ordinary shares. Net income/loss is allocated under the assumption of after-tax interests for the AT1 capital, which are accrued pro rata temporis.

## NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (ASSETS)

## 48 Cash Reserve

## Cash reserve

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Balance with central banks	1,388	999	999
<b>Total</b>	<b>1,388</b>	<b>999</b>	<b>999</b>

Cash in hand as of 31 December 2018 amounts €0 million as was the case in previous year.

## 49 Financial Assets at Fair Value Through Profit or Loss

## Financial assets at fair value through profit or loss

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Positive fair values of stand-alone derivatives	749	870	870
Interests in companies and funds qualified as debt instruments	3	3	–
Debt securities	258	333	–
Bonds and notes	258	333	–
Public-sector issuers	81	83	–
Other issuers	177	250	–
Loans and advances to customers	649	529	–
Public-sector loans and advances	327	401	–
Real estate loans and advances	322	128	–
<b>Total</b>	<b>1,659</b>	<b>1,735</b>	<b>870</b>

## 50 Financial Assets at Fair Value Through Other Comprehensive Income

## Financial assets at fair value through other comprehensive income

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Debt securities	1,564	1,735	2,382
Bonds and notes	1,564	1,735	2,382
Public-sector issuers	676	782	1,970
Other issuers	888	953	412
Loans and advances to other banks	16	17	–
Public-sector loans and advances	16	17	–
Loans and advances to customers	404	430	–
Public-sector loans and advances	404	430	–
Interests in companies and funds qualified as debt instruments	–	–	3
<b>Total</b>	<b>1,984</b>	<b>2,182</b>	<b>2,385</b>

## 51 Financial Assets at Amortised Cost After Credit Loss Allowances<sup>1</sup>

### Financial assets at amortised cost before loss allowances

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Debt securities	8,039	8,667	8,253
Bonds and notes	8,039	8,667	8,253
Public-sector issuers	5,550	4,849	3,686
Other issuers	2,489	3,818	4,567
Loans and advances to other banks	2,231	2,400	2,415
Public-sector loans and advances	544	691	706
Other loans and advances to other banks	1,687	1,709	1,709
Loans and advances to customers	40,183	39,360	40,274
Public-sector loans and advances	13,458	14,343	15,112
Real estate loans and advances	26,512	24,793	24,934
Other loans and advances to customers	1	2	6
Claims from finance lease arrangements	212	222	222
<b>Total</b>	<b>50,453</b>	<b>50,427</b>	<b>50,942</b>

### Development in risk provisioning

in € million	1.1.2018 (IFRS 9)	Transfer Stage 1	Transfer Stage 2	Transfer Stage 3	New Busi- ness and additions	Repayments and derecogni- tions	Amounts used	Changes of credit risk (net)	Other	31.12.2018 (IFRS 9)
Allowances for credit losses on financial assets	-105	-	-	-	-9	4	1	-5	1	-113
measured at fair value through other comprehensive income	-1	-	-	-	-	-	-	-	-	-1
Debt securities	-1	-	-	-	-	-	-	-	-	-1
Stage 2	-1	-	-	-	-	-	-	-	-	-1
measured at amortised cost	-104	-	-	-	-9	4	1	-5	1	-112
Debt securities	-10	-	-	-	-	-	-	5	-	-5
Stage 1	-1	-	-	-	-	-	-	-	-	-1
Stage 2	-9	-	-	-	-	-	-	5	-	-4
Loans and advances to customers	-94	-	-	-	-9	4	1	-10	1	-107
Stage 1	-12	-1	-	-	-9	3	-	6	-	-13
Stage 2	-43	1	-	-	-	1	-	3	-	-38
Stage 3	-39	-	-	-	-	-	1	-19	1	-56
Provisions in the off-balance-sheet lending business (contingent liabilities and other commitments)	-2	-	-	-	-1	1	-	-5	-	-7
Stage 1	-2	-	-	-	-1	1	-	-4	-	-6
Stage 2	-	-	-	-	-	-	-	-1	-	-1
<b>Total</b>	<b>-107</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-10</b>	<b>5</b>	<b>1</b>	<b>-10</b>	<b>1</b>	<b>-120</b>

If all stage 1 financial assets were in stage 2, the balance of credit loss allowances as at 31 December 2018 would increase by €25 million. For off-balance sheet transactions, the increase would be €9 million.

If all stage 2 financial assets were in stage 1, the balance of credit loss allowances would decrease by €28 million. For off-balance sheet transactions, the decrease would be €1 million.

<sup>1</sup> Including claims from finance lease agreements.

### Credit loss allowances on financial assets in the measurement categories LaR and AfS

in € million	Individual allowances	Portfolio-based allowances	Total
<b>Credit loss allowances on loans and advances as of 1.1.2017 (IAS 39)</b>	<b>-86</b>	<b>-44</b>	<b>-130</b>
Changes through profit or loss	-2	-4	-6
Changes through accumulated other comprehensive income	64	1	65
Use of existing credit loss allowances	64	1	65
Effects from translating foreign currency and other changes	-	-	-
<b>Credit loss allowances on loans and advances as of 31.12.2017 (IAS 39)</b>	<b>-24</b>	<b>-47</b>	<b>-71</b>

The carrying amount of financial investments (LaR) as at 31 December 2017 consisted of reduced portfolio-based allowances in the amount of €13 million.

### Development in gross carrying amounts

in € million	1.1.2018 (IFRS 9)	Transfer Stage 1	Transfer Stage 2	Transfer Stage 3	New Business and additions	Repayments and derecognitions	Direct write-offs	Other	31.12.2018 (IFRS 9)
Gross carrying amounts of financial assets	52,609	-	-	-	10,144	-10,147	-1	-168	52,437
measured at fair value through other comprehensive income	2,182	-	-	-	3	-147	-	-54	1,984
Debt securities	1,735	-	-	-	3	-140	-	-34	1,564
Stage 1	1,446	-	-	-	3	-140	-	-27	1,282
Stage 2	289	-	-	-	-	-	-	-7	282
Loans and advances to other banks	17	-	-	-	-	-	-	-1	16
Stage 1	17	-	-	-	-	-	-	-1	16
Loans and advances to customers	430	-	-	-	-	-7	-	-19	404
Stage 1	430	-	-	-	-	-7	-	-19	404
measured at amortised cost	50,427	-	-	-	10,141	-10,000	-1	-114	50,453
Debt securities	8,667	-	-	-	67	-604	-	-91	8,039
Stage 1	7,663	248	-	-	67	-401	-	-81	7,496
Stage 2	1,004	-248	-	-	-	-203	-	-10	543
Loans and advances to other banks	2,400	-	-	-	328	-501	-	4	2,231
Stage 1	2,400	-	-	-	328	-501	-	4	2,231
Loans and advances to customers	39,360	-	-	-	9,746	-8,895	-1	-27	40,183
Stage 1	36,782	688	-620	-67	9,746	-8,202	-	-38	38,289
Stage 2	2,384	-688	620	-90	-	-662	-	14	1,578
Stage 3	194	-	-	157	-	-31	-1	-3	316
Off-balance-sheet business <sup>1)</sup>	4,665	-	-	-	4,142	-4,123	-	7	4,691
Stage 1	4,540	68	-93	-	4,142	-4,020	-	1	4,638
Stage 2	122	-68	93	-	-	-100	-	6	53
Stage 3	3	-	-	-	-	-3	-	-	-
<b>Total</b>	<b>57,274</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14,286</b>	<b>-14,270</b>	<b>-1</b>	<b>-161</b>	<b>57,128</b>

<sup>1)</sup> Notional amount of contingent liabilities and other commitments.

pbb Group's maximum exposure to credit risk is reflected in the net carrying amounts reported in the statement of financial position. The collaterals mainly consist of land charges. Loans and advances to customers of stage 3 were collateralised in an amount of €260 million as at the reporting date.



At pbb Group, contractual amounts outstanding of €0 million (2017: €0 million) existed for financial assets that were written off in 2018 and that continue to be subject to enforcement measures.

Due to collateral provided, pbb Group did not recognise stage 3 credit loss allowances as at 31 December 2018 for credit-impaired financial instruments with a carrying amount of €3 million.

pbb Group did not hold any foreclosures or other seized collateral as at 31 December 2018 and 31 December 2017.

## 52 Positive Fair Values of Hedge Accounting Derivatives

### Positive fair values of hedge accounting derivatives

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Positive fair values of hedge accounting derivatives	2,207	2,678	2,678
<b>Total</b>	<b>2,207</b>	<b>2,678</b>	<b>2,678</b>

## 53 Valuation Adjustment from Portfolio Hedge Accounting (Assets)

The line item valuation adjustments from portfolio hedge accounting includes the positive fair values in relation to the hedged risks in the portfolios of hedged items. They amounted to €2 million as at 31 December 2018 (31 December 2017: €-1 million).

## 54 Tangible Assets

### Development of tangible assets

in € million	2018 (IFRS 9)	2017 (IAS 39)
<b>Operating equipment</b>		
<b>Acquisition/production costs</b>		
Balance at 1.1.	21	21
Additions	1	-
<b>Balance at 31.12.</b>	<b>22</b>	<b>21</b>
<b>Depreciation and write-ups</b>		
Balance at 1.1.	-15	-13
Depreciation	-3	-2
<b>Balance at 31.12.</b>	<b>-18</b>	<b>-15</b>
<b>Carrying amounts</b>		
Balance at 31.12.	4	6

## 55 Intangible Assets

### Development of intangible assets

in € million				2018 (IFRS 9)	2017 (IAS 39)
	Software acquired	Internally developed Software	Other intangible assets	Total	Total
<b>Acquisition/production costs</b>					
<b>Balance at 1.1.</b>	<b>47</b>	<b>58</b>	<b>9</b>	<b>114</b>	<b>94</b>
Additions	2	8	3	13	20
Reclassifications	–	9	–9	–	–
Disposals	–26	–	–	–26	–
<b>Balance at 31.12.</b>	<b>23</b>	<b>75</b>	<b>3</b>	<b>101</b>	<b>114</b>
<b>Amortisation and write-ups</b>					
<b>Balance at 1.1.</b>	<b>–42</b>	<b>–36</b>	<b>–</b>	<b>–78</b>	<b>–70</b>
Amortisation	–1	–10	–	–11	–8
Impairment	–	–1	–	–1	–
Disposals	26	–	–	26	–
<b>Balance at 31.12.</b>	<b>–17</b>	<b>–47</b>	<b>–</b>	<b>–64</b>	<b>–78</b>
<b>Carrying amounts</b>					
<b>Balance at 31.12.</b>	<b>6</b>	<b>28</b>	<b>3</b>	<b>37</b>	<b>36</b>

Research and development expenditure recognised as an expense amounted to €8 million (2017: €4 million).

## 56 Repurchase Agreements

As a pledgor of genuine repurchase agreements, pbb Group has pledged assets with a book value of €2.1 billion (31 December 2017: €2.0 billion). The securities are still recognised as assets. The considerations which have been received amount to €1.9 billion (31 December 2017: €1.9 billion), and are recognised solely as liabilities measured at amortised cost. Assets in repurchase agreements are the only transferable assets the acquirer can sell or repledge in the absence of default.

## 57 Securitisation

As of 31 December 2017 pbb Group had the synthetic securitisation Estate UK-3 with a transaction period of 15 years (maturity 2022) and a total volume of lending of €127 million (31 December 2017: €178 million). The collateral-taker of the transaction with commercial mortgage loans is pbb. The credit linked notes were completely sold to the investors. Overall a reduction of expected loss according to Basel III of €153 million (31 December 2017: €154 million) was achieved. The trustee of one particular securitisation transaction doubts the admissibility of the loss allocation intended by pbb, in the amount of approximately GBP 113 million. According to the contractual stipulations of the securitisation transaction, the trustee has appointed an Expert to decide on the loss allocation. In pbb's opinion, the conditions for the planned allocation of the losses have been met. In the event of the loss allocation being fully or partially inadmissible, pbb would have to bear the losses to the corresponding extent.

## NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (EQUITY AND LIABILITIES)

### 58 Financial Liabilities at Fair Value Through Profit or Loss

#### Financial liabilities at fair value through profit or loss

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Negative fair values of stand-alone derivatives	881	1,040	956
<b>Total</b>	<b>881</b>	<b>1,040</b>	<b>956</b>

### 59 Financial Liabilities at Amortised Cost

#### Financial liabilities at amortised cost

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Liabilities to other banks	3,867	3,797	3,797
Liabilities to central banks	1,886	1,894	1,894
Registered Mortgage Pfandbriefe	228	290	290
Registered Public Pfandbriefe	290	203	203
Other registered securities	23	24	24
Other liabilities to other banks	1,440	1,386	1,386
Liabilities to customers	24,901	26,244	26,244
Registered Mortgage Pfandbriefe	4,550	4,790	4,790
Registered Public Pfandbriefe	10,194	10,847	10,847
Other registered securities	2,427	2,332	2,332
Other liabilities to customers	7,730	8,275	8,275
Bearer Bonds	21,237	19,876	19,876
Money market instruments	35	-	-
Mortgage Pfandbriefe	12,376	9,963	9,963
Public Pfandbriefe	4,680	5,740	5,740
Other bearer bonds	4,146	4,173	4,173
Subordinated liabilities	709	1,002	1,002
Securitised subordinated liabilities	649	761	761
Non-securitised subordinated liabilities	60	241	241
<b>Total</b>	<b>50,714</b>	<b>50,919</b>	<b>50,919</b>

### 60 Negative Fair Values of Hedge Accounting Derivatives

#### Negative fair values of hedge accounting derivatives

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Negative market values of hedge derivatives	2,538	2,805	2,889
<b>Total</b>	<b>2,538</b>	<b>2,805</b>	<b>2,889</b>

## 61 Valuation Adjustment from Portfolio Hedge Accounting (Liabilities)

The item "Valuation adjustment from portfolio hedge accounting (liabilities)" comprises negative fair values as regards the hedged risks in the hedged portfolios of hedged items. They totalled €23 million as at 31 December 2018 (31 December 2017: €0 million).

## 62 Provisions

### Provisions

in € million	31.12.2018 (IFRS 9)	1.1.2018 (IFRS 9)	31.12.2017 (IAS 39)
Provisions for pensions and other post employment benefit obligations	84	86	86
Restructuring provisions	11	3	3
Provisions for commitments and guarantees given	7	2	–
Other provisions	166	156	156
<b>Total</b>	<b>268</b>	<b>247</b>	<b>245</b>

There are defined contribution and defined benefit plans for the employees of pbb Group. In the defined contribution plans pbb makes payments for commitments by industry-wide organisations. In almost all non-German entities, a defined percentage of fixed salary is paid into externally managed pension funds for employees as part of defined contribution pension schemes. Expenses in respect of defined contribution plans amounted €3 million (2017: €2 million). The expense is expected to remain stable in 2019. Expenses in respect of defined contribution plans for persons with a key function in the Group amounted to less than €1 million (2017: less than €1 million). The employer's contribution to the statutory pension insurance amounted to €5 million (2017: €6 million).

There are defined benefit pension commitments for many employees in Germany. There are no defined benefit pension commitments in the non-German entities. For the defined benefit plans the employees receive a direct commitment from their respective company. The receipt of retirement pensions or disability pensions starts after a vesting period is fulfilled, at the earliest after reaching a minimum age in the case of part of full incapacity for work, at the latest when going into retirement, usually after completion of the 65th year of life. In case of active employees, there are predominantly modern modular pension plans. For the other eligible persons there are also final salary-based defined benefit plans. The annual pension module depends, among other things, on the gross annual salary paid and the member's length of service. The surviving dependant's pension usually amounts to 60% of the pension of the spouse respectively the entitlement on that. The pension plan is administered by pbb itself with the aid of an external service provider for the administration.

Pension provisions are recognised for obligations arising from direct commitments. The defined benefit plans have been principally closed for new entrants since 1 April 2004. There have been no plan amendments, curtailments and settlements in the years 2018 and 2017.

The risk of insolvency is covered within the framework of legal requirements by Pensionssicherungsverein a. G. in relation to the total amount of pension obligations.

The following actuarial assumptions were used to measure the defined benefit pension obligations:

#### Actuarial assumptions

in %	31.12.2018/ 1.1.2019	31.12.2017/ 1.1.2018
Discount rate	2.02	1.93
Rate of increase in pension obligations	1.50	1.50
Rate of increase in future compensation and vested rights <sup>1)</sup>	2.50	2.50

<sup>1)</sup> Against the background of the adjustments of annual base salaries made in 2015 to a uniform amount of € 500,000 and the introduction of a variable remuneration component, we expect a rate of increase in future compensation and vested rights of 0%, also in view of the appropriateness of Management Board compensation for the active Management Board members in the financial years 2018 und 2017.

On 20 July 2018, HEUBECK AG published the new mortality tables RT 2018 G. These mortality tables replace the RT 2005 G tables previously used by pbb Group for the measurement of pension obligations (and similar long-term obligations). pbb Group has commissioned an actuary to measure its pension obligations on the basis of the new mortality tables in its consolidated financial statements as at 31 December 2018.

The rate of increase in career for members of the Management Board amounts 0.0% (31 December 2017: 0.0%), for directors and non-pay-scale staff 1.5% (31 December 2017: 1.5%) and for pay-scale staff 0.5% (31 December 2017: 0.5%). The guidance tables 2018G from Klaus Heubeck were used as the biometric basis.

The defined benefit pension commitments of pbb do not contain any unusual or entity-specific risks. pbb is faced by the common demographic risks, for example from longevity or invalidity of the entitled employees, and common financial risks like for example a change of the discount rate. pbb took out reinsurance to protect itself against parts of these risks. The reinsurance is a qualifying insurance policy in accordance with IAS 19 and thus is a plan asset. The fair value of plan assets is a component of the net liability from defined benefit plans which is deducted from the present value of the defined benefit obligation. The reinsurance does not consist of any unusual or plan-specific risks.

Principally, the pension payments of the reinsured pension obligations are funded by the income from the plan assets. If the income does not cover the pension payments pbb has to pay the pensions out of its own funds. For the non-reinsured pension obligations the payments are also made out of own funds.

#### Statement of financial position items (net defined benefit liability)

in € million	31.12.2018 (IFRS 9)	31.12.2017 (IAS 39)
Present value of defined benefit obligation	272	279
Fair value of plan assets	-188	-193
<b>Total</b>	<b>84</b>	<b>86</b>

**Development of net defined benefit liability**

in € million	2018 (IFRS 9)	2017 (IAS 39)
<b>Balance at 1.1.</b>	<b>86</b>	<b>95</b>
Transfer of staff	–	–
Pension expenses	5	5
Remeasurements	–3	–10
Reclassifications in reimbursements	–	–
Payments into plan assets	–	–
Direct payments to beneficiaries	–4	–4
<b>Balance at 31.12.</b>	<b>84</b>	<b>86</b>

**Development of defined benefit obligation**

in € million	2018 (IFRS 9)	2017 (IAS 39)
<b>Balance at 1.1.</b>	<b>279</b>	<b>291</b>
Transfer of staff	–	–
Current service costs	3	3
Interest expenses	5	5
Remeasurements	–2	–7
Actuarial gains/losses from demographic assumptions	3	–
Actuarial gains/losses from financial assumptions	–3	–7
Actuarial gains/losses from experience assumptions	–2	–
Settlements	–	–
Payments to beneficiaries	–13	–13
<b>Balance at 31.12.</b>	<b>272</b>	<b>279</b>

Plan assets consist exclusively of reinsurance pledged to plan beneficiaries. The plan assets accordingly do not contain any own financial instruments or any own used tangible assets. No further material contributions to the plan assets are aimed in 2019. pbb does not use special asset-liability matching strategies to manage the pledged reinsurance.

**Development of fair value of plan assets**

in € million	2018 (IFRS 9)	2017 (IAS 39)
<b>Balance at 1.1.</b>	<b>193</b>	<b>196</b>
Transfer of staff	–	–
Interest income	3	3
Remeasurements	1	3
Payments into plan assets	–	–
Payments to beneficiaries	–9	–9
Reclassifications in/from reimbursements	–	–
<b>Balance at 31.12.</b>	<b>188</b>	<b>193</b>

**Development of pension expenses**

in € million	2018 (IFRS 9)	2017 (IAS 39)
Service costs	3	3
Current service costs	3	3
Past service costs	–	–
Service costs on curtailments	–	–
Service costs on settlements	–	–
Net interest expenses	2	2
Interest expenses on defined benefit obligation	5	5
Interest income on plan assets	–3	–3
<b>Total</b>	<b>5</b>	<b>5</b>

Compared to 2018 a largely constant pension expense is expected for 2019. Pension expenses are part of general and administrative expenses.

Remeasurements of the net defined benefit liability result from actuarial gains and losses and the return on plan assets excluding amounts included in net interest on the net defined benefit liability.

**Remeasurement recognised in other comprehensive income (equity)**

in € million	2018 (IFRS 9)	2017 (IAS 39)
Actuarial gains/losses from demographic assumptions	–3	–
Actuarial gains/losses from financial assumptions	3	7
Actuarial gains/losses from experience assumptions	2	–
Remeasurements from plan assets	1	3
<b>Total</b>	<b>3</b>	<b>10</b>

**Development of reimbursement**

in € million	2018 (IFRS 9)	2017 (IAS 39)
<b>Balance at 1.1.</b>	<b>2</b>	<b>2</b>
Disposals	–	–
<b>Balance at 31.12.</b>	<b>2</b>	<b>2</b>

The reimbursements result from unpledged reinsurance policies.

The quantitative sensitivity analysis – which uses the same measurement methods as the obligation recognised in the statement of financial position – for the material actuarial assumptions is as follows:

**Actuarial assumptions**

in € million	Change of sensitivity level (+ increase/- decrease)	Gross obligation	
		31.12.2018 (IFRS 9)	31.12.2017 (IAS 39)
Basic value of the calculation of sensitivity		272	279
Discount rate	in percentage points +0.5	254	260
	in percentage points -0.5	293	300
Rate of increase in pension obligations	in percentage points +0.5	287	295
	in percentage points -0.5	258	264
Rate of increase in future compensation and vested rights	in percentage points +0.5	273	279
	in percentage points -0.5	272	279

The assumption of mortality only has an immaterial effect because the risk of longevity is mainly covered by plan assets.

The weighted average duration of the defined benefit obligations amounted to 15 years at 31 December 2018 (31 December 2017: 15 years).

**Development of provisions (without provisions for pension and similar obligations)**

in € million	Restructuring provisions	Provisions for contingent liabilities and other commitments	Other provisions
<b>Balance at 1.1.2017 (IAS 39)</b>	<b>14</b>	<b>-</b>	<b>133</b>
Additions	-	-	76
Reversals	-3	-	-24
Amounts used	-8	-	-32
Reclassifications	-	-	3
<b>Bestand at 31.12.2017 (IAS 39)</b>	<b>3</b>	<b>-</b>	<b>156</b>
<b>Balance at 1.1.2018 (IFRS 9)</b>	<b>3</b>	<b>2</b>	<b>156</b>
Additions	9	6	38
Reversals	-	-1	-21
Amounts used	-1	-	-21
Reclassifications	-	-	14
<b>Balance at 31.12.2018 (IFRS 9)</b>	<b>11</b>	<b>7</b>	<b>166</b>

With the "Focus and Investment" initiative, which was resolved by the Management Board and the Supervisory Board at the end of 2018, pbb Group addresses the changing market and competitive environment. The initiative involves the expansion of the sales activities in the US real estate financing market as well as the reorganisation of Public Investment Finance, and the centralisation of infrastructure tasks. In this connection, pbb Group recognised a restructuring provision for personnel measures in the amount of €9 million in 2018. This provision is expected to have been fully used by 2020. The remaining balance of restructuring provisions recognised in previous years in the amount of €2 million for the strategic realignment of pbb Group is also expected to have been fully used by 2020.



The provisions for contingent liabilities and other commitments mainly comprise provisions for guarantee risks, letters of credit, irrevocable loan commitments and litigation risks in the lending business.

Other provisions comprise those for legal and tax risks of €88 million (31 December 2017: €100 million), and for legal expenses of €35 million (31 December 2017: €33 million).

#### **Legal Risks (Litigation Risks)**

pbb is obliged, in all jurisdictions in which it conducts its business, to comply with a large number of statutory and supervisory requirements and regulations such as certain rules of conduct to compliance with competition rules, to avoid conflicts of interest, to combat money laundering, to prevent terrorist financing, to prevent criminal offences, to regulate foreign trade and to safeguard bank, business and data secrecy. Given the nature of business and international expansion of activities and the large number of relevant requirements and regulations, pbb is involved in litigation, arbitration and administrative proceedings in some countries. These also include criminal proceedings as well as the assertion of claims in an amount not specified by the party asserting the claim. pbb recognises provisions for the uncertain obligations arising from these proceedings if the potential outflow of resources is sufficiently likely and the amount of the obligation can be estimated. The probability of the outflow of resources, which often cannot be estimated with certainty, is highly dependent on the outcome of the proceedings. The assessment of this probability and the quantification of the obligation are largely based on estimates. The actual liability can vary considerably from this estimate. Accounting for the individual legal procedure, pbb analyses developments of the individual cases and comparable cases, drawing on its own expertise or opinions by external consultants, and in particular by legal advisors, depending on the significance and complexity of the respective case. The provisions recognised for the proceedings are not reported separately as pbb believes that the outcome of the proceedings would be seriously compromised by their disclosure.

The profit participation certificates issued by the predecessor institutions participated in significant losses due to the net losses for the period incurred in the years 2008 et. seq. respectively pbb's unappropriated retained losses since this time. The redemption amounts have reduced and interest payment has been suspended. Individual investors therefore initiated legal proceedings, contesting in particular various individual clauses relating to loss participation and replenishment following loss participation. The key questions in this connection are which balance sheet items must be taken into account to calculate loss participation and whether replenishment is required if pbb records a net income, unappropriated retained earnings or another income. Courts have decided against the legal view of pbb in view of the individual decisions regarding profit participation certificates. These proceedings resulted in a partial or comprehensive increase in redemption claims, or in the subsequent distribution of cancelled coupon payments or interest payment claims. Further claims could possibly follow. At present, legal proceedings with a total amount in dispute of approximately €20 million are pending. Whilst pbb endeavours to solve legal disputes by way of out-of-court settlements, it exploits the legal remedies at its disposal when needed.

pbb recognised sufficient provisions for trial costs of first and second instance proceedings at the German fiscal court (Finanzgericht) regarding fiscal authority audit findings affecting one of its predecessor institutions during the period from 2003 to 2008, and the corresponding tax assessment notes, which were issued in 2016.

Hypo Real Estate Bank International AG – a predecessor institution of pbb – issued Credit Linked Notes (“CLNs”) in February 2007, within the scope of the Estate UK-3 (“UK-3”) synthetic securitisation transaction. The CLNs were issued in order to hedge a portfolio of loans in the UK. The portfolio comprised 13 loans, financing 110 commercial property assets. The CLNs have an aggregate volume of GBP113.68 million, structured in six classes with sequential loss allocation. The biggest individual loan in the portfolio (amounting to approximately GBP176 million) subsequently defaulted, and the underlying collateral was realised in January 2016. The proceeds from realisation were clearly lower than the original collateral value, leading to a default loss of approximately GBP113 million. On 30 November 2016, pbb requested the auditor Deloitte (the Trustee of the UK-3 transaction) to allocate the losses to UK-3 investors. On 13 December 2016, Deloitte has notified pbb that doubts remain as to whether the loss allocation intended by pbb is admissible, and that they will appoint an Expert to decide on that matter. In the second quarter of 2017, the expert was appointed. The expert had not yet made a decision by the time the annual statements for the financial year 2018 were prepared. In pbb's opinion, the prerequisites for the intended allocation of losses have been met. In the event of the loss allocation being fully or partially inadmissible, pbb would have to bear the losses to the corresponding extent.

On 4 July 2017, the German Federal Court of Justice (Bundesgerichtshof, “BGH”) determined the inadmissibility of processing fees for corporate loans agreed upon by way of a standard form. pbb still believes that the financing parameters used for complex financing structures in the lending business are generally subject to individual negotiations. pbb recognised sufficient provisions for all doubtful cases.

Moreover, no proceedings exist for which the Management Board believes the probability of an outflow of resources to be likely (or which are of material significance to pbb for other reasons) with an amount in dispute in excess of €5 million. However, pbb is subject to prudential proceedings, which bear the risk of a material outflow of resources.

### 63 Maturities of Specific Financial Assets and Liabilities

#### Maturities of specific financial assets and liabilities (without derivatives)

in € million						31.12.2018 (IFRS 9)
	repayable on demand/ unspecified	up to 3 months	more than 3 months up to 1 year	more than 1 year up to 5 years	more than 5 years	Total
Cash reserve	1,388	–	–	–	–	1,388
Financial assets at fair value through profit or loss	3	142	64	221	480	910
Debt securities	–	138	–	–	120	258
Loans and advances to customers	–	4	64	221	360	649
Interests in companies and funds qualified as debt instruments	3	–	–	–	–	3
Financial assets at fair value through other comprehensive income	–	40	129	1,090	725	1,984
Debt securities	–	30	100	776	658	1,564
Loans and advances to other banks	–	–	–	16	–	16
Loans and advances to customers	–	10	29	298	67	404
Financial assets at amortised cost before credit loss allowances	1,715	1,567	4,717	21,036	21,418	50,453
Debt securities	–	143	461	2,469	4,966	8,039
Loans and advances to other banks	1,687	–	–	–	544	2,231
Loans and advances to customers	28	1,424	4,256	18,567	15,908	40,183
<b>Total of financial assets</b>	<b>3,106</b>	<b>1,749</b>	<b>4,910</b>	<b>22,347</b>	<b>22,623</b>	<b>54,735</b>
Financial liabilities measured at amortised cost	2,193	2,552	7,174	19,485	19,310	50,714
Liabilities to other banks	899	34	88	2,175	671	3,867
thereof: registered securities	–	30	57	109	345	541
Liabilities to customers	1,280	1,035	2,536	5,846	14,204	24,901
thereof: registered securities	–	382	567	2,868	13,354	17,171
Bearer bonds	14	1,461	4,550	11,399	3,813	21,237
Subordinated liabilities	–	22	–	65	622	709
<b>Total of financial liabilities</b>	<b>2,193</b>	<b>2,552</b>	<b>7,174</b>	<b>19,485</b>	<b>19,310</b>	<b>50,714</b>

### Remaining maturities of selected financial assets and liabilities (without derivatives)

	31.12.2017 (IAS 39)					
in € million	repayable on demand/ unspecified	up to 3 months	more than 3 months up to 1 year	more than 1 year up to 5 years	more than 5 years	<b>Total</b>
Cash reserve	999	–	–	–	–	999
Financial assets at fair value through profit or loss	–	–	–	–	–	–
Financial assets at fair value through other comprehensive income	3	44	51	423	1,864	2,385
Debt securities	–	44	51	423	1,864	2,382
Interests in companies and funds qualified as debt instruments	3	–	–	–	–	3
Financial assets at amortised cost before credit loss allowances	2,887	1,636	3,055	19,650	23,701	50,929
Debt securities <sup>1)</sup>	–	144	489	2,264	5,343	8,240
Loans and advances to other banks	1,709	45	104	15	542	2,415
Loans and advances to customers	1,178	1,447	2,462	17,371	17,816	40,274
<b>Total of financial assets</b>	<b>3,889</b>	<b>1,680</b>	<b>3,106</b>	<b>20,073</b>	<b>25,565</b>	<b>54,313</b>
Financial liabilities measured at amortised cost	2,386	3,145	3,443	22,506	19,439	50,919
Liabilities to other banks	991	42	81	2,056	627	3,797
thereof: registered securities	–	23	76	107	311	517
Liabilities to customers	1,395	1,076	2,312	6,920	14,541	26,244
thereof: registered securities	–	374	956	3,169	13,470	17,969
Bearer bonds	–	1,901	868	13,459	3,648	19,876
Subordinated liabilities	–	126	182	71	623	1,002
<b>Total of financial liabilities</b>	<b>2,386</b>	<b>3,145</b>	<b>3,443</b>	<b>22,506</b>	<b>19,439</b>	<b>50,919</b>

<sup>1)</sup> Reduced by portfolio-based allowances according to IAS 39.

## 64 Equity

Subscribed capital equals the maximum liability of the shareholder for the liabilities of the corporation to its creditors. The subscribed capital as of 31 December 2018 and during the entire financial year 2018 amounted to € 380,376,059.67 which is divided into 134,475,308 ordinary bearer shares with no par value representing a theoretical interest in the share capital of approximately € 2.83 per share. As at 31 December 2018 and 2017, pbb did not hold any treasury shares.

Please refer to the disclosures pursuant to section 315a (1) HGB included in the "Supplemental Information" section of the Combined Management Report for information on authorised and contingent capital.

Additional paid-in capital includes contributions from a previous financial year as well as premiums from the issue of shares; except for an amount of € 25,383,131.91 (31 December 2017: € 25,383,131.91) the additional paid-in capital is freely available pursuant to section 272 (2) no. 4 HGB. Retained earnings were generally created only from net income of the current financial year or previous periods.

Accumulated other comprehensive income from pension commitments increased by €2 million. This increase was due to the rise of the discount rate applied to measure defined benefit pension obligations, from 1.93% as at year-end 2017 to 2.02%, and to amended demographic assumptions. Accumulated other comprehensive income declined by a total of €45 million compared to 1 January 2018 due to the planned reduction of cash flow hedge reserves, and to the decline in reserves from financial assets at fair value through other comprehensive income.

In June 2018, pbb distributed dividends of €144 million (or €1.07 per share) to shareholders. The remaining consolidated profit of €38 million was appropriated to retained earnings.

The additional equity instruments include Additional Tier 1 (AT1) capital in the total noinal amount of €300 million less transaction costs of €2 million. AT1 capital qualifies as equity because there is no obligation to repay, or to make debt servicing payments on an ongoing basis. The bond issued by pbb on 12 April 2018 carries an initial coupon of 5.75% and has no final maturity. There are certain conditions attached to the coupon payments. This issue enables pbb Group to increase additional regulatory Tier 1 capital and thereby strengthen its leverage ratio. The issue increased both the Tier 1 ratio and the Own Funds Ratio by around two percentage points each; the leverage ratio improved to slightly above 5%. Given the structure of the issue as an AT1 instrument, the Common Equity Tier 1 (CET1) ratio remained unchanged.

At the Annual General Meeting on 7 June 2019, the Management Board and the Supervisory Board will propose to distribute a dividend of €1.00 per dividend bearing share.

## 65 Trust Business

As at 31 December 2018 and 31 December 2017, there were no trust assets or liabilities reported in the statement of financial position.

## NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

### 66 Disclosures to the Items in the Consolidated Statement of Cash Flows

The consolidated statement of cash flows shows the cash flows of the financial year broken down by operating activities, investing activities and financing activities. Cash and cash equivalents correspond to the balance sheet item cash reserve, and include cash in hand and credit balances at central banks.

Operating activities are defined broadly, and correspond to operating result. Cash flow from operating activities includes payments (inflows and outflows) attributable financial assets at fair value through profit or loss, positive fair values of hedging derivatives, financial assets at fair value through other comprehensive income, financial assets at amortised cost and other assets. Inflows and outflows attributable to financial liabilities measured at fair value through profit or loss/negative fair values from hedging derivatives, liabilities measured at amortised cost (without inflows/outflows from subordinated liabilities) and other liabilities are also included under operating activities. The interest and dividend payments resulting from operating activities are shown under cash flow from operating activities. This also relates to cash flows from subordinated liabilities.

Cash flow from investing activities comprises payments for investment and security holdings as well as for tangible and intangible assets. In the financial year 2018, no subsidiaries were disposed (2017: one subsidiary).

Cash flow from financing activities comprises inflows from capital increases, payments into reserves and silent participations as well as inflows and outflows for subordinated capital.

#### Liabilities Development from Financing Activities

in € million	2018 (IFRS 9)	2017 (IAS 39)
<b>Subordinated liabilities</b>		
<b>Balance at 1.1.</b>	<b>1,002</b>	<b>886</b>
changes from financing cash flows	-281	126
changes arising from obtaining or losing control of subsidiaries or other business	-	-
the effect of changes in foreign exchange rates	-	-
changes in fair values	-	-
Other changes	-12	-10
<b>Balance at 31.12.</b>	<b>709</b>	<b>1,002</b>

## NOTES TO DERIVATIVE TRANSACTIONS AND HEDGED ITEMS IN HEDGE ACCOUNTING

Risks are the possibilities to deviate from the planned future targets resulting from unpredictability of the future and disruptions. Interest rate risks and foreign exchange risks are primarily relevant for pbb Group. These arise from open positions for example in the case of mismatches of maturities or the variability respectively fixing of interest rates. Interest rate risks are accounted in hedge accounting. Other risks of the hedged items like for example credit risk or foreign exchange risk are not accounted in hedge accounting but are controlled bank wide.

Generally pbb Group hedges interest rate risks. However, in individual cases this may not be possible or sensible. The hedge ratio is determined in relation to the expectation of the expectations for example of the interest rate development or the costs of hedging. If the risk is not hedged completely for example because the interest rate of the underlying asset does not match completely with the interest rate of the hedging instrument hedge ineffectiveness may arise. A further source of ineffectiveness may be different credit risks of the counterparties of the hedged item and hedging instrument.

Hedging relationships between financial instruments are classified as a fair value hedge, a cash flow hedge or hedge of a net investment in a foreign operation in accordance with IAS 39. Hedging instruments used to hedge interest rate risks are mainly interest rate derivatives, for example interest rate swaps and interest rate options.

Specific disclosures required by IFRS 7 are shown in the risk and opportunity report, amongst others about credit risk, market risk and liquidity risk.

**Fair Value Hedge Accounting** Under IAS 39, with a fair value hedge, a recognised asset, a recognised liability, offbalance-sheet fixed obligation or a precisely designated part of such an asset, liability or obligation, is hedged against the risk of a change in fair value which is attributable to a specific risk and possibly has an effect on profit or loss for the period.

If the hedge of the fair value in the course of the reporting period meets the criteria of IAS 39.88, the hedge is accounted as follows:

- > The profit or loss arising when the hedging instrument is remeasured at fair value (for a derivative hedging instrument) or the currency component of its carrying amount measured in accordance with IAS 21 (for non-derivative hedging instruments) is recognised in profit or loss for the period and
- > The carrying amount of a hedged item is adjusted affecting profit or loss by the profit or loss arising from the hedged item and attributable to the hedged risks. This is applicable if the hedged item is otherwise measured at cost. The profit or loss attributable to the hedged risk is recognised in profit or loss for the period if the hedged item is an a financial asset measured at fair value through other comprehensive income. The amortisation of the hedge adjustment is started on the date of the revoking of the hedge relationship.

pbb Group uses fair value hedge accounting for accounting micro-hedge and macro-hedge relationships.

Interest rate risks are hedged under micro fair value hedge accounting. Any ineffectiveness within the permissible range pursuant to IAS 39 is reported under net income from hedging relationships. Positive and negative market values of hedging instruments are reported at fair value in positive fair value of hedge accounting derivatives or negative fair values of hedge accounting derivatives, respectively. The adjustment of the hedged item's carrying amount by the profit or loss attributable to the hedged risk directly affects the hedged item. The retrospective effectiveness test is conducted using the regression analysis. The dollar-offset method is used to quantify prospective ineffectiveness. If the hedge relationship is terminated for reasons other than the derecognition of the hedged item, the difference between the carrying amount of the hedged item at that point and the value at which it would have been carried, had the hedge never existed (the unamortised fair value adjustment), is amortised through profit or loss over the remaining term of the original hedge and recognised in net interest income. If the hedged item is derecognised, e.g. due to disposal or repayment, the unamortised fair value adjustment is recognised immediately in profit or loss.

In the context of portfolio hedge accounting within the meaning of IAS 39, interest rate risks from loans and advances as well as from liabilities are hedged on a portfolio basis. The portfolio hedge accounting is aimed to account the effects from the macro interest steering for hedged positions. The fair values as regards the hedged risks in the hedged cash flows of the portfolios of hedged items are reported either on the assets or on the liabilities side as valuation adjustments from portfolio hedge accounting. The changes in the fair value of hedged risks from the portfolios of hedged items are recognised in net income from hedging relationships. The market values of hedging instruments are recognised in statement of financial position at fair value in positive fair values of hedge accounting derivatives or negative fair values of hedge accounting derivatives, respectively. The changes in value are shown in net income from hedging relationships, thus largely compensating the effect on profit or loss from the valuation of the cash flows from the portfolios of hedged items. The cash flows from the portfolios of hedged items are determined monthly within the framework of a dynamic hedge designation and discontinuation process. The resulting valuation adjustments are amortised over the remaining term of the time band and recognised in net interest income. In case of a derecognition of cash flows of hedged items from the portfolio of hedged items, the associated valuation adjustment is reversed on a pro-rata basis and recognised in net interest income.

**Cashflow Hedge Accounting** According to IAS 39, a cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with the recognised asset or liability (for instance some or all future interest payments on variable-interest debt) or a highly probable forecast transaction that could affect profit or loss.

Under cash flow hedge accounting, hedging instruments are measured at fair value. The measurement result has to be broken down into an effective and an ineffective portion of the hedge relationship. As at 31 December 2018, and 31 December 2017, pbb Group did not designate any derivatives to cash flow hedges. The cash flow hedge reserve remaining from designations will be reversed in line with the hedged cash flows from underlying transactions. pbb applies a prospective effectiveness test every quarter. In case ineffectiveness is discovered, the cash flow hedge reserve is reversed through profit or loss.

**Hedge of a Net Investment in a Foreign Operation** A net investment hedge is a hedge of the foreign currency exposure on a net investment in a foreign operation. Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. pbb Group did not hedge a net investment in a foreign operation in the financial years 2018 and 2017.



## 67 Derivative Transactions

In order to minimize (reduce) both the economic and the regulatory credit risk, bilateral netting agreements have been concluded. By means of such netting agreements, the positive and negative fair values of the derivatives contracts included under the master agreement can be offset against one another, and the future regulatory risk add-ons for these products can be reduced. Through this netting process, the credit risk is limited to a single net claim on the party to the contract.

For both regulatory reports and the internal measurement and monitoring of the credit commitments, such risk-reducing techniques are utilised only if they are considered to be enforceable under the respective legal system in the event that the business associate becomes insolvent. Legal advice is taken in order to check enforceability.

Similar to the master agreements, pbb Group concludes collateral agreements with its business associates to collateralise the net claim or liability remaining after netting (obtained or pledged collateral). Usually, this collateral management reduces credit risk by means of prompt measurement and adjustment of the exposure to the customers.

### Volume of derivatives as of 31 December 2018 (IFRS 9)

in € million	Nominal amount				Fair value/carrying amount		Fair value change for effectiveness calculation
	Remaining maturities			Total	positive	negative	
	up to 1 year	more than 1 to 5 years	more than 5 years				
<b>Stand-alone derivatives<sup>1)</sup></b>	<b>6,959</b>	<b>12,221</b>	<b>3,825</b>	<b>23,005</b>	<b>749</b>	<b>881</b>	
Interest rate derivatives	3,337	11,559	3,778	18,674	713	860	
OTC derivatives	3,337	11,559	3,778	18,674	713	860	
Interest rate swaps	2,107	5,275	3,564	10,946	707	854	
Interest rate options	1,230	6,284	214	7,728	6	6	
Currency derivatives	2,951	–	–	2,951	23	8	
OTC derivatives	2,951	–	–	2,951	23	8	
Forward currency transactions	2,951	–	–	2,951	23	8	
Other derivatives	671	662	47	1,380	13	13	
Cross currency basis swaps	671	662	47	1,380	13	13	
<b>Derivatives in micro vair value hedge accounting<sup>2)3)</sup></b>	<b>32,800</b>	<b>5,954</b>	<b>15,950</b>	<b>54,704</b>	<b>2,207</b>	<b>2,538</b>	<b>-77</b>
Interest rate derivatives	32,800	5,954	15,669	54,423	2,204	2,502	-71
OTC derivatives	32,800	5,954	15,669	54,423	2,204	2,502	-71
Interest rate swaps	32,800	5,302	14,243	52,345	2,204	2,476	-65
Interest rate options	–	652	1,426	2,078	–	26	-6
Other derivatives	–	–	281	281	3	36	-6
Cross currency basis swaps	–	–	281	281	3	36	-6

<sup>1)</sup> In statement of financial position disclosed under "Financial assets at fair value through profit or loss" respectively "Financial liabilities at fair value through profit or loss".

<sup>2)</sup> In statement of financial position disclosed under "Positive fair values of hedge accounting derivatives" respectively "Negative fair values of hedge accounting derivatives".

<sup>3)</sup> Including Eurex AG balance after derivatives netting and cash collaterals independent from their use.

**Volume of  
derivatives as of  
31 December 2017  
(IAS 39)**

in € million	Nominal amount				Fair value/carrying amount		Fair value change for effectiveness calculation
	Remaining maturities			Total	positive	negative	
	up to 1 year	more than 1 to 5 years	more than 5 years				
<b>Stand-alone derivatives<sup>1)</sup></b>	<b>7,997</b>	<b>14,490</b>	<b>5,288</b>	<b>27,775</b>	<b>870</b>	<b>956</b>	
Interest rate derivatives	3,457	13,983	5,150	22,590	835	929	
OTC derivatives	3,457	13,983	5,150	22,590	835	929	
Interest rate swaps	1,708	7,285	4,957	13,950	827	922	
Interest rate options	1,749	6,698	193	8,640	8	7	
Currency derivatives	3,794	–	–	3,794	29	17	
OTC derivatives	3,794	–	–	3,794	29	17	
Forward currency transactions	3,794	–	–	3,794	29	17	
Other derivatives	746	507	138	1,391	6	10	
Cross currency basis swaps	746	507	138	1,391	6	10	
<b>Derivatives in micro vair value hedge accounting<sup>2)3)</sup></b>	<b>25,436</b>	<b>10,431</b>	<b>17,434</b>	<b>53,301</b>	<b>2,678</b>	<b>2,889</b>	<b>-107</b>
Interest rate derivatives	25,436	10,431	17,167	53,034	2,675	2,870	-113
OTC derivatives	25,436	10,431	17,167	53,034	2,675	2,870	-113
Interest rate swaps	25,436	9,778	15,698	50,912	2,675	2,845	-130
Interest rate options	–	653	1,469	2,122	–	25	17
Other derivatives	–	–	267	267	3	19	6
Cross currency basis swaps	–	–	267	267	3	19	6

<sup>1)</sup> In statement of financial position disclosed under "Financial assets at fair value through profit or loss" respectively "Financial liabilities at fair value through profit or loss".

<sup>2)</sup> In statement of financial position disclosed under "Positive fair values of hedge accounting derivatives" respectively "Negative fair values of hedge accounting derivatives".

<sup>3)</sup> Including Eurex AG balance after derivatives netting and cash collaterals independent from their use.

The fair value change for the effectiveness test of derivatives in portfolio hedge accounting that were netted against Eurex AG amounted to €21 million in 2018 and resulted from interest rate derivatives/interest rate swaps (2017: €1 million from interest rate derivatives/interest rate swaps).

Counterparties	31.12.2018 (IFRS 9)		31.12.2017 (IAS 39)	
	Fair value		Fair value	
	positive	negative	positive	negative
in € million				
Central governments and central banks of OECD member states	250	25	–	–
OECD banks	2,583	3,234	3,142	3,803
OECD financial institutions	42	147	–	–
Other companies and private individuals	81	13	406	42
<b>Total</b>	<b>2,956</b>	<b>3,419</b>	<b>3,548</b>	<b>3,845</b>

The reserve for cash flow hedge accounting, where derivatives were no longer designated in the financial years 2018 and 2017, amounted to €0 million (31 December 2017: €22 million) after deferred taxes. In 2018, €–31 million (2017: €–30 million) before taxes was reclassified from the cash flow hedge reserve to net interest income.

## 68 Hedged Items under Hedge Accounting

### Hedged Items under Hedge Accounting 31 December 2018 (IFRS 9)

in € million	Micro fair value hedge				Portfolio hedge	
	Carrying amount	Thereof:			Valuation adjustment	Change for effectiveness calculation in reporting period
		Hedge adjustment included in carrying amount	Hedge adjustment remaining after discontinuation of hedging relationship	Value change for the effectiveness test in the period		
Financial assets at fair value through other comprehensive income	892	50	72	-4	-	-
Interest related hedge accounting	892	50	72	-4	-	-
Financial assets at amortised cost	19,232	1,346	1,631	31	2	4
Interest related hedge accounting	18,933	1,326	1,631	25	2	4
Currency related hedge accounting	299	20	-	6	-	-
Financial liabilities measured at amortised cost	29,738	1,632	1,126	50	23	-26
Interest related hedge accounting	29,738	1,632	1,126	50	23	-26

### Hedged Items under Hedge Accounting 31 December 2017 (IAS 39)

in € million	Micro fair value hedge				Portfolio hedge	
	Carrying amount	Thereof:			Valuation adjustment	Change for effectiveness calculation in reporting period
		Hedge adjustment included in carrying amount	Hedge adjustment remaining after discontinuation of hedging relationship	Value change for the effectiveness test in the period		
Financial assets at fair value through other comprehensive income	1,674	147	370	-39	-	-
Interest related hedge accounting	1,429	138	370	-33	-	-
Currency related hedge accounting	245	9	-	-6	-	-
Financial assets at amortised cost	20,473	1,279	1,576	-431	-1	-
Interest related hedge accounting	20,393	1,275	1,576	-431	-1	-
Currency related hedge accounting	80	4	-	-	-	-
Financial liabilities measured at amortised cost	32,097	1,674	1,331	576	-	-1
Interest related hedge accounting	32,097	1,674	1,331	576	-	-1

The item "Valuation adjustment from portfolio hedge accounting (assets)" comprises fair values as regards the hedged risks in the hedged cash flows from the portfolios of hedged items (assets). The item "Valuation adjustment from portfolio hedge accounting (liabilities)" comprises fair values as regards the hedged risks in the hedged cash flows from the portfolios of hedged items (liabilities).

### Ineffectiveness of the hedge<sup>1)</sup>

in € million	2018 (IFRS 9)	2017 (IAS 39)
Result from micro fair value hedge accounting (interest rate risk)	-	-1
Result from portfolio hedge accounting (interest rate risk)	-1	-
<b>Total</b>	<b>-1</b>	<b>-1</b>

<sup>1)</sup> Reported in net income from hedge accounting.

## OTHER NOTES TO THE FINANCIAL INSTRUMENTS

### 69 Undiscounted Cash Flows of Financial Liabilities

#### Contractually agreed undiscounted cash flows of the financial liabilities according to IFRS 7.39

in € billion	31.12.2018 (IFRS 9)	31.12.2017 (IAS 39)
Up to 3 months	3	4
From derivative financial instruments	–	–
From non-derivative financial instruments	3	4
More than 3 months to 1 year	8	5
From derivative financial instruments	–	1
From non-derivative financial instruments	8	4
More than 1 year to 5 years	23	26
From derivative financial instruments	1	1
From non-derivative financial instruments	22	25
More than 5 years	26	24
From derivative financial instruments	2	2
From non-derivative financial instruments	24	22
<b>Total</b>	<b>60</b>	<b>59</b>

The undiscounted cash flows are presented in accordance with the contractual maturity, meaning that options or termination rights are not taken into account. This presentation does not reflect the economic management which is based on expected cash flows. The liquidity risk strategy and management of pbb Group is described in the Risk and Opportunity Report.

### 70 Assets Assigned or Pledged as Collateral

Assets (without cash collaterals) have been pledged as collateral for the following liabilities and received collaterals:

#### Liabilities

in € million	31.12.2018 (IFRS 9)	31.12.2017 (IAS 39)
Financial liabilities measured at amortised cost	2,228	2,185
<b>Total</b>	<b>2,228</b>	<b>2,185</b>

The following assets were pledged as collateral for the aforementioned liabilities:

#### Assets pledged

in € million	31.12.2018 (IFRS 9)	31.12.2017 (IAS 39)
Financial assets at fair value through other comprehensive income	370	380
Financial assets at amortised cost	2,026	1,875
<b>Total</b>	<b>2,396</b>	<b>2,255</b>

The assets pledged mainly resulted from repurchase agreements. The transactions were carried out at the normal standard terms for repurchase transactions and concluded on an arm's-length basis.

In addition, cash collateral was provided in a total amount of €20 million (31 December 2017: €15 million) for the irrevocable payment obligations to the German Federal Agency for Financial Market Stabilisation (Finanzmarktstabilisierungsanstalt – "FMSA") resulting from the bank levy, and to the deposit guarantee scheme of German banks.

## 71 Collaterals Permitted to Resell or Repledge

As of 31 December 2018 and as of 31 December 2017 there were no collaterals that may be resold or repledged in the absence of default.

## 72 Transfer of Financial Assets

When pbb Group transfers financial assets that do not qualify for derecognition (see also Note "Financial Instruments"), they continue to be reported in the statement of financial position.

Transfer of financial assets as of 31 December 2018 (IFRS 9)	Transferred financial assets that are not derecognised in their entirety			
	Transferred assets		Corresponding liabilities	
	Carrying amounts	Thereof: Repo transactions	Carrying amounts	Thereof: Repo transactions
in € million				
Financial assets at fair value through other comprehensive income	370	370	339	339
Debt securities	370	370	339	339
Loans and advances to other banks	–	–	–	–
Loans and advances to customers	–	–	–	–
Financial assets at amortised cost	2,026	1,684	1,889	1,547
Debt securities	1,684	1,684	1,547	1,547
Loans and advances to other banks	–	–	–	–
Loans and advances to customers	342	–	342	–
<b>Total</b>	<b>2,396</b>	<b>2,054</b>	<b>2,228</b>	<b>1,886</b>

**Transfer of financial assets  
as of 31 December 2017  
(IAS 39)**

in € million	Transferred financial assets that are not derecognised in their entirety			
	Transferred assets		Corresponding liabilities	
	Carrying amounts	Thereof: Repo transactions	Carrying amounts	Thereof: Repo transactions
Financial assets at fair value through other comprehensive income	380	380	365	365
Debt securities	380	380	365	365
Financial assets at amortised cost	1,875	1,590	1,814	1,529
Debt securities	1,590	1,590	1,529	1,529
Loans and advances to customers	285	–	285	–
<b>Total</b>	<b>2,255</b>	<b>1,970</b>	<b>2,179</b>	<b>1,894</b>

<sup>1)</sup> Adjustment of prior year amounts: the originally reported carrying amounts amounted to €1,153 million (of which €876 million were for repurchase agreements).

At balance sheet date the fair value of financial assets at amortised cost amounted to €1,989 million (31 December 2017: €1,896 million). The fair value of the corresponding liabilities amounted to €1,878 million (31 December 2017: €1,796 million). The net position from the fair values of assets and liabilities amounted to €111 million (31 December 2017: €100 million). pbb Group does not derecognise these financial assets, since not substantially all risks (in particular credit risk) and rewards of ownership are transferred.

In addition, securities with a carrying amount of €125 million (31 December 2017: €67 million) were transferred to Eurex as a collateral for clearing fund contribution and initial margin for derivative transactions.

pbb Group generally has no continuing involvement in transferred and derecognised financial assets.

### 73 Fair Values of Financial Instruments

The fair value of financial instruments, in the opinion of pbb Group, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price). The fair values were determined as of the balance sheet date based on the market information available and on valuation methods described here.

All financial assets and liabilities that are measured at fair value are grouped into the three fair value hierarchies by pbb Group. Reclassifications within the fair value hierarchy are made at the end of the reporting period. The three-level hierarchy is based on the degree to which the input for the fair value measurement is observable:

- > Level 1 – quoted priced (unadjusted) in active markets for identical financial assets or financial liabilities (market prices)
- > Level 2 – inputs that are observable either directly or indirectly, other than quoted prices included within Level 1
- > Level 3 – valuation techniques that include inputs that are not based on observable market data (unobservable inputs)

### Fair values and fair value hierarchy of financial instruments

in € million	31.12.2018 (IFRS 9)				
	Carrying amount	Fair value	Fair value		
			Level 1	Level 2	Level 3
<b>Assets in the scope of IFRS 13</b>	<b>57,581</b>	<b>58,868</b>	<b>8,181</b>	<b>20,071</b>	<b>30,616</b>
Measured at fair value in the statement of financial position	5,850	5,850	1,328	3,896	626
Financial assets at fair value through profit or loss	1,659	1,659	11	1,178	470
Positive fair values of stand-alone derivatives	749	749	–	749	–
Debt securities	258	258	8	214	36
Loans and advances	649	649	–	215	434
Shares in investment funds qualified as debt instruments	3	3	3	–	–
Financial assets at fair value through other comprehensive income	1,984	1,984	1,317	511	156
Debt securities	1,564	1,564	1,317	93	154
Loans and advances	420	420	–	418	2
Positive fair values of hedge accounting derivatives	2,207	2,207	–	2,207	–
Not measured at fair value in the statement of financial position	51,731	53,018	6,853	16,175	29,990
Cash reserve	1,388	1,388	1,388	–	–
Financial assets at amortised cost <sup>1)</sup>	50,341	51,630	5,465	16,175	29,990
Debt securities	8,035	8,029	3,833	2,939	1,257
Loans and advances	42,306	43,601	1,632	13,236	28,733
Thereof: Claims from finance lease arrangements	212	220	–	220	–
Valuation adjustment from portfolio hedge accounting (assets)	2	–	–	–	–
<b>Liabilities in the scope of IFRS 13</b>	<b>54,156</b>	<b>54,976</b>	<b>19,772</b>	<b>4,970</b>	<b>30,234</b>
Measured at fair value in the statement of financial position	3,419	3,419	–	3,404	15
Financial liabilities at fair value through profit or loss	881	881	–	866	15
Negative fair values of stand-alone derivatives	881	881	–	866	15
Negative fair values of hedge accounting derivatives	2,538	2,538	–	2,538	–
Not measured at fair value in the statement of financial position	50,737	51,557	19,772	1,566	30,219
Financial liabilities measured at amortised cost	50,714	51,557	19,772	1,566	30,219
Liabilities to other banks	3,867	3,875	899	–	2,976
Liabilities to customers	24,901	25,577	222	1	25,354
Bearer bonds	21,237	21,385	18,134	1,529	1,722
Subordinated liabilities	709	720	517	36	167
Valuation adjustment from portfolio hedge accounting (liabilities)	23	–	–	–	–

<sup>1)</sup> Less credit loss allowances.

## Fair values and fair value hierarchy of financial instruments

31.12.2017  
(IAS 39)

in € million	Carrying amount	Fair value	Fair value		
			Level 1	Level 2	Level 3
<b>Assets in the scope of IFRS 13</b>	<b>57,789</b>	<b>59,852</b>	<b>9,011</b>	<b>21,361</b>	<b>29,480</b>
Measured at fair value in the statement of financial position	5,933	5,933	2,385	3,548	–
Financial assets at fair value through profit or loss	870	870	–	870	–
Positive fair values of stand-alone derivatives	870	870	–	870	–
Financial assets at fair value through other comprehensive income	2,385	2,385	2,385	–	–
Debt securities <sup>1)</sup>	2,385	2,385	2,385	–	–
Positive fair values of hedge accounting derivatives	2,678	2,678	–	2,678	–
Not measured at fair value in the statement of financial position	51,856	53,919	6,626	17,813	29,480
Cash reserve	999	999	999	–	–
Financial assets at amortised cost <sup>2)</sup>	50,858	52,920	5,627	17,813	29,480
Debt securities	8,240	8,423	3,918	2,902	1,603
Loans and advances	42,618	44,497	1,709	14,911	27,877
Thereof: Claims from finance lease arrangements	222	231	–	231	–
Valuation adjustment from portfolio hedge accounting (assets)	–1	–	–	–	–
<b>Liabilities in scope of IFRS 13</b>	<b>54,794</b>	<b>56,199</b>	<b>17,883</b>	<b>4,039</b>	<b>34,277</b>
Measured at fair value in the statement of financial position	3,845	3,845	–	3,828	17
Financial liabilities at fair value through profit or loss	956	956	–	956	–
Negative fair values of stand-alone derivatives	956	956	–	956	–
Negative fair values of hedge accounting derivatives	2,889	2,889	–	2,872	17
Not measured at fair value in the statement of financial position	50,949	52,354	17,883	211	34,260
Financial liabilities measured at amortised cost	50,949	52,354	17,883	211	34,260
Liabilities to other banks	3,797	3,796	990	–	2,806
Liabilities to customers	26,244	27,333	240	–	27,093
Bearer bonds	19,876	20,144	16,280	–	3,864
Subordinated liabilities	1,002	1,051	373	211	467
Other financial liabilities	30	30	–	–	30
Valuation adjustment from portfolio hedge accounting (liabilities)	–	–	–	–	–

<sup>1)</sup> Including share in investment funds amounting to €3 million.

<sup>2)</sup> Less credit loss allowances.

In 2018, one financial asset of the financial instruments accounted for at fair value was reclassified from Level 2 to Level 1 in the amount of €8 million, since a liquid market price has now become available. In addition, financial assets accounted for at fair value were reclassified in 2018 from Level 3 to Level 2 in the amount of €58 million and in reverse from Level 2 to Level 3 in the amount of €36 million since there was a change in the assessment as regards the observability of input parameters for measurement. In 2017, by contrast, reclassifications of transactions accounted for at fair value from Level 3 to Level 2 amounted to €40 million for hedging derivatives with a positive fair value and to €5 million for hedging derivatives with a negative fair value.

In terms of the measurement of covered Pfandbriefe, the materiality of Level 3 input parameters has declined over the previous year in favour of Level 1 input parameters. Therefore, an adjustment from Level 3 to Level 2 as to volume and fair value in the amount of €1.5 billion was recorded for issues where measurement continues to be derived from external parameters.



## Disclosures to the Measurement Methods and Input Parameters

**Measurement Process** Both the Finance and the Risk Management & Control divisions play a role in the measurement process. The Finance division supplies accounting data. This includes:

- > identification data, such as business identification numbers or International Securities Identification Numbers (ISINs)
- > static data such as notional amounts, name and country of the counterparty and (remaining) terms
- > accounting data such as carrying amounts, accruals and the effects of hedge accounting

Risk Management & Control calculates additional data used to measure fair value such as interest rates, credit spreads and market prices, as well as internal ratings and LGDs for certain financial instruments.

Risk Management & Control uses the determined input parameters to calculate (and provide to Finance) the fair value or measurement price of financial instruments based on accepted and validated measurement methods. Finance consolidates the data received from Risk Management & Control with the data held for accounting and reporting purposes, and verifies completeness.

### Level 2 instruments measured at fair value as of 31.12.2018

Measurement methods	Observable parameter
DCF methods (discounted cash flows)	Euro zone inflations rates
	Reference interest rates
	Saisonalities of Euro zone inflations rates
	Spot market exchange rates
	Yield curves
Option pricing models	Cap volatilities
	CMS Spread Options (strike price)
	CMS Spread Options (option price)
	Euro zone inflations rates
	Reference interest rates
	Saisonalities of Euro zone inflations rates
	Swaption volatilities
	Spot market exchange rates
	Exchange rates volatilities
Yield curves	

### Level 3 instruments measured at fair value as of 31.12.2018

Measurement methods	Non-observable parameters	Range
DCF method	Historical index/index correlations	+/- 25% of the correlations
	Histrocial Index/exchange rate correlations	+/- 25% of the correlations
	PD/LGD Model Spread	+/- 2 rating levels for PD; +/- 0.1 for LGD
Proxy model	Proxy models	+/- triple standard deviation

**Financial instruments not measured at fair value as of 31.12.2018**

Measurement methods	Observable parameter (level 2)	Non-observable parameter (level 3)
DCF models	(Own) credit spreads and Liqui-AddOns, if necessary	Internal rating classes
	Reference interest rates	Recovery rates
	Risk-free interest rate	Estimated remaining maturities
	Observable future cash flows	Estimated future cash flows
	Benchmark interest rates	(Own) credit spreads (secondary market grid)
Bachelier cap-floor model (for floored plain vanilla floater)	Additional cap volatilities including smile	Additional cap volatilities including smile
Bachelier cap-floor model (for fixed coupons options)	Additional swaption volatilities including smile	Additional swaption volatilities including smile
Prices on non-active markets	Prices of proxy trades	–

**Sensitivities**

The calculation of sensitivity is based on shock scenarios for correlations and volatilities pursuant to the level 3 measurement methods table. These amounts were calculated independently from each other.

However, for a receivable with a EUR/GBP quanto structure, there were correlations between the unobservable input parameters used (EUR-GBP interest or interest/EUR-GBP FX correlations). This is also the case for the associated derivative that hedges the asset from an economic perspective. The fair value of the asset (+/- €57 million) and the associated derivative (+/- €60 million) are offset by each other.

Alongside this, FVOCI securities are valued using a proxy approach. Changes in input parameters resulted in a difference of €+8 million and €–7 million, respectively. FVOCI receivables and FVPL securities are also measured using a proxy approach. In the alternative scenario, there were slight changes (+/- less than €1 million).

Non-observable spreads in a PD (probability of default)/LGD (loss given default) model are used for the valuation of drawings intended for syndication. The changes in spreads result in a change in fair value of €+2 million and €–5 million, respectively.

**Changes in level 3 instruments measured at fair value**

in € million	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial liabilities measured at fair value through profit or loss
<b>Balance at 1.1.2017 (IAS 39)</b>	<b>40</b>	<b>–</b>	<b>21</b>
Profit or loss	–	–	1
Reclassification out of level 3	–40	–	–5
<b>Balance at 31.12.2017 (IAS 39)</b>	<b>–</b>	<b>–</b>	<b>17</b>
IFRS 9 first-time adoption effect	304	225	–
<b>Balance at 1.1.2018 (IFRS 9)</b>	<b>304</b>	<b>225</b>	<b>17</b>
Profit or Loss	–6	–53	–2
Additions (new business)	291	–	–
Disposals/repayments	–97	–16	–
Reclassification in level 3	36	–	–
Reclassification out of level 3	–58	–	–
<b>Balance at 31.12.2018 (IFRS 9)</b>	<b>470</b>	<b>156</b>	<b>15</b>

## 74 Restructured Loans and Advances

As of 31 December 2018, restructuring agreements mainly related to standstill agreements and to the discontinuation of contractual arrangements.

### Restructured loans and advances at 31.12.2018 (IFRS 9)

in € million	Gross carrying amount of exposure with forbearance measures			Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions	
	Performing exposures with forbearance measures	Non-performing exposures with forbearance measures	Total	Performing exposures with forbearance measures	Non-performing exposures with forbearance measures
	Financial assets at fair value through profit or loss	–	45	45	–
Financial assets at fair value through other comprehensive income	–	–	–	–	–
Financial assets at amortised cost	–	139	139	–	–28
Loan commitments	–	–	–	–	–

## 75 Netting of Financial Instruments

The following tables show the gross carrying amounts of recognised financial assets respectively liabilities, the gross carrying amounts of the items offset in the statement of financial position and the net amounts of the financial assets and liabilities recognised in the statement of financial position. They also show the rights of set-off that did not lead to an offsetting in the statement of financial position, the collateral received for financial assets, the collateral pledged for financial liabilities and the net amounts of financial assets and liabilities remaining following the application of the netting agreements and deduction of the collateral.

### Gross Carrying Amounts of the Items offset in the Statement of Financial Position

On-balance sheet netting of derivatives which are settled through Eurex Clearing led to a reduction in total assets of €1.7 billion as at 31 December 2018 (31 December 2017: €1.6 billion).

### Netting Agreements

pbp Group routinely enters into standardised bilateral netting agreements in the derivatives business to minimise the legal risk as well as the economic and regulatory counterparty default risk. The national respectively international agreements used are the German Master Agreement for Financial Futures and the ISDA Master Agreement issued by the International Swaps and Derivatives Association. The derivatives cannot be offset in the statement of financial position since their conditions are not identical (e.g. different terms or currency underlyings).

### Collateral

In addition, pbp Group also enters into collateral agreements to hedge the net receivables and net liabilities arising following offsetting according to the netting agreements (collateral received or pledged). The collateral used is primarily cash collateral; however, securities are sometimes also used by way of title transfer. The collateral agreements likewise cannot be offset against the derivatives.

**Netting of financial instruments  
as of 31 December 2018  
(IFRS 9)**

in € billion	Gross carrying amounts of recognised financial assets/liabilities	Gross carrying amounts of the items offset in the statement of financial position	Net amounts presented in the statement of financial position	Rights of set-off that did not lead to an offsetting in the statement of financial position	Received respectively pledged collateral	Remaining net amount
<b>Financial assets</b>	<b>4.7</b>	<b>1.7</b>	<b>3.0</b>	<b>1.7</b>	<b>1.0</b>	<b>0.3</b>
Positive fair values of derivatives	4.7	1.7	3.0	1.7	1.0	0.3
<b>Financial liabilities</b>	<b>5.1</b>	<b>1.7</b>	<b>3.4</b>	<b>1.7</b>	<b>1.7</b>	<b>-</b>
Negative fair values of derivatives	5.1	1.7	3.4	1.7	1.7	-

**Netting of financial instruments  
as of 31 December 2017  
(IAS 39)**

in € billion	Gross carrying amounts of recognised financial assets/liabilities	Gross carrying amounts of the items offset in the statement of financial position	Net amounts presented in the statement of financial position	Rights of set-off that did not lead to an offsetting in the statement of financial position	Received respectively pledged collateral	Remaining net amount
<b>Financial assets</b>	<b>5.2</b>	<b>1.6</b>	<b>3.6</b>	<b>2.1</b>	<b>1.2</b>	<b>0.3</b>
Positive fair values of derivatives	5.2	1.6	3.6	2.1	1.2	0.3
<b>Financial liabilities</b>	<b>5.4</b>	<b>1.6</b>	<b>3.8</b>	<b>2.1</b>	<b>1.7</b>	<b>-</b>
Negative fair values of derivatives	5.4	1.6	3.8	2.1	1.7	-

## OTHER NOTES

### 76 Contingent Liabilities and Other Commitments

#### Contingent liabilities and other commitments

in € million	31.12.2018	31.12.2017
<b>Contingent liabilities</b>	<b>76</b>	<b>120</b>
Guarantees and warranties	76	120
<b>Other commitments</b>	<b>4,731</b>	<b>4,667</b>
Irrevocable loan commitments	4,731	4,667
<b>Commitments from bank levies</b>	<b>20</b>	<b>15</b>
Collateral pledged <sup>1)</sup>	20	15
<b>Total</b>	<b>4,827</b>	<b>4,802</b>

<sup>1)</sup> Cash collateral was provided for the irrevocable payment obligations to the German Federal Agency for Financial Market Stabilisation (Finanzmarktstabilisierungsanstalt – "FMSA") resulting from the bank levy, and to the deposit guarantee scheme of German banks. pbb Group is also obliged to make additional payments for the bank levy if requested.

For pbb Group irrevocable loan commitments form the largest part of other commitments. Irrevocable loan commitments comprise all commitments of a creditor which can grant a loan and advance at a later date and which can cause a credit risk. These are mainly credit commitments which are not fully drawn.

As at balance sheet date the fair value of contingent liabilities amounted to €76 million (31 December 2017: €120 million) and the fair value of irrevocable loan commitments to €4,750 million (31 December 2017: €4,680 million). As at 1 October 2018, within the framework of the further development of estimation methods, pbb Group refined the estimation procedure for the determination of the fair values of irrevocable loan commitments to the current standard for the measurement of disbursed loans. This further development led to an increase in fair value from €4,146 million to €4,165 million based on an overall portfolio of irrevocable loan commitments in the amount of €4,139 million as at 30 September 2018.

Contingent liabilities and other commitments represent the maximum default risk within the meaning of IFRS 7. pbb Group has a claim for reimbursement of expenses in case a contingent liability is utilised. There were no material contingent liabilities as at 31 December 2018 and 31 December 2017.

### 77 Leases

#### Operate Lease as a Lessee

pbb Group is a lessee in the context of operate lease agreements. Non-terminable operate lease agreements for land and buildings as well as for operating and business equipment existed as of 31 December 2018 and as of 31 December 2017.

#### Future minimum lease payments by maturities

in € million	31.12.2018	31.12.2017
up to 1 year	8	7
more than 1 year to 5 years	21	24
more than 5 years	10	13
<b>Total</b>	<b>39</b>	<b>44</b>

Operating lease agreements concluded by pbb Group were made on an arm's-length basis and are mainly related to the rental of land and buildings. The agreements include partial renewal options that the lease can be extended for several periods, and price escalation clauses in the form of stepped rents or indexation clauses as well as release clauses. Rental expenses including incidental rental costs amounted to €7 million (2017: €6 million).

### Finance Lease as a Lessor

#### Reconciliation

in € million	31.12.2018	31.12.2017
<b>Gross investment</b>	<b>244</b>	<b>256</b>
Unearned finance income	-32	-34
<b>Net investment/present value of minimum lease payments</b>	<b>212</b>	<b>222</b>

#### Allocation by maturities

in € million	31.12.2018	31.12.2017
<b>Gross investment</b>	<b>244</b>	<b>256</b>
up to 1 year	16	15
1 year to 5 years	63	62
5 years and over	165	179
<b>Present value of minimum lease payments</b>	<b>212</b>	<b>222</b>
up to 1 year	12	11
1 year to 5 years	50	48
5 years and over	150	163

Finance lease agreements resulted from setting up the financing for an office building as a finance lease.

## 78 Key Regulatory Capital Ratios

The Management Board manages the Group's capitalisation, based on regulatory capital ratios in accordance with the CRR and additional regulations announced by the ECB (Supervisory Review and Evaluation Process – "SREP").

Based on the results of the analysis as well as using benchmark comparison, the ECB may impose minimum capitalisation or liquidity requirements, over and above existing regulatory requirements. As a key result of SREP, pbb Group has been required to maintain a minimum CET1 ratio of 9.125% for 2018 (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). This capital requirement is based on the Basel III transitional rules and comprises a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (P2R: 2.75%) and the capital conservation buffer (CCB: 1.875% phased-in for 2018). Furthermore, pbb Group had to fulfil a total capital requirement of 12.625% in 2018 (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios). It is based on the Basel III transitional rules and comprises a Pillar 1 minimum own funds requirement (8.0%), a Pillar 2 capital requirement (2.75%) and the capital conservation buffer (1.875% phased-in for 2018). Both requirements, the Group complied with at all times during the year under review.

Towards the end of the year under review (draft) as well as in February 2019 (final), the ECB notified pbb Group of the regular annual re-determination of minimum capital requirements for 2019. With effect from 1 March 2019, pbb Group has been required to maintain a minimum CET1 ratio of 9.5% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). This capital requirement is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum capital requirement (4.5%), a Pillar 2 capital requirement (P2R: 2.5%) and the capital conservation buffer (CCB: 2.5%). The CET1 minimum capital requirement that applies for 2019 also represents the threshold for mandatory calculation of a so-called maximum distributable amount (MDA). This generally limits distributions to the CET1 capital, new performance-based remuneration, and interest payments on additional Tier 1 capital.

With effect from 1 March 2019 pbb Group has been required to maintain a total capital requirement of 13.0% (excluding the countercyclical capital buffer, which varies according to country, and hence, for specific portfolios – as at 31 December 2018, it stood at 0.19%). It is based on the final Basel III requirements (excluding transitional rules) and comprises a Pillar 1 minimum own funds requirement (8.0%), a Pillar 2 capital requirement (2.5%) and the capital conservation buffer (2.5%).

Please refer to Risk and Opportunity Report for key regulatory capital ratios.

## 79 Group Auditor's Fee

### Group auditors' fee

in € thousand	2018	2017
Audit	1,798	1,945
Other assurance services	252	271
Tax advisory services	–	–
Other non-audit services	53	1,392
<b>Total</b>	<b>2,103</b>	<b>3,608</b>

The auditors' fee for KPMG AG WPG Wirtschaftsprüfungsgesellschaft comprised – for the most part – the audit of the consolidated financial statements and the unconsolidated financial statements of pbb as well as the audit of financial statements prepared by different subsidiaries, including the extension of the audit assignment in line with the applicable legal requirements and the focal points of the audit as agreed upon with the Supervisory Board. In addition, audit reviews of interim financial statements were performed.

Other assurance services comprised the preparation of comfort letters in connection with bond issues, a limited assurance engagement for the summarised separate non-financial report of pbb, and other assurance services required by supervisory authorities.

Other non-audit services mainly comprised quality assurance services in connection with recently introduced legal and regulatory requirements, as well as within the framework of the regulatory stress test which are unrelated to the introduction or implementation of internal control and risk management procedures.

KPMG AG Wirtschaftsprüfungsgesellschaft has been appointed as external auditor for the Annual and Consolidated Financial Statements of Deutsche Pfandbriefbank AG since the merger of Hypo Real Estate Bank AG and DEPFA Deutsche Pfandbriefbank AG to form Deutsche Pfandbriefbank AG in 2009. KPMG had already worked in the same function for predecessor institutions of Hypo

Real Estate Bank AG. The financial statements were signed by German Public Auditors (Wirtschaftsprüfer) Mr Wiechens and, since the financial year 2012, Ms Schmidt. In the financial year 2015, the financial statements were signed by the German Public Auditors (Wirtschaftsprüfer) Messrs Mock and Haider. In the financial years 2016 and 2017, the financial statements were signed by the German Public Auditors (Wirtschaftsprüfer) Mr Winner and Mr Dielehner. The latter had already signed pbb's financial statements in 2009. For the financial year 2018, Messrs Dielehner and Winner are again intended to be the signing German Public Auditors (Wirtschaftsprüfer).

## 80 Related Parties Disclosures

According to IAS 24 (Related-Party Disclosures), a party is related to an entity if, directly or indirectly through one or more intermediaries, the party controls or is controlled by the reporting entity, has an interest in the entity that gives it significant influence over the entity or has joint control over the entity as well as associates and joint ventures. In addition, retirement benefit schemes for post-employment benefits for employees are also included under related parties.

### Related Entities

According to pbb's knowledge, Hypo Real Estate Holding GmbH's (HRE Holding's) share in pbb stood at 3.5% as at 31 December 2018 (31 December 2017: 20.0% plus one share), after selling 16.5% of pbb's share capital in May 2018. As a result, pbb Group no longer considers HRE Holding and all companies under the control, joint management or significant influence of the Federal Republic of Germany (as indirect shareholder of HRE Holding) to be related parties within the meaning of IAS 24.

As at the reporting date, pbb Group had receivables to associates not accounted for using the equity method in the amount of €20 million (31 December 2017: €27 million); as in the previous year, there were no liabilities.

On 31 December 2018 liabilities to defined contribution plans amounted to less than €1 million (31 December 2017: less than €1 million).



## Related Persons

pbb Group defines related persons as being the members of the Management Board and the Supervisory Board, plus pbb's second-level managers and members of senior management of pbb's subsidiaries, as well as close members of their families and affiliated enterprises.

Total remuneration of former members of the Management Board and their surviving dependants amounted to €4,896 thousand for 2018 (2017: €4,926 thousand). Remuneration for Supervisory Board members in office during the year under review totalled €690 thousand (2017: €694 thousand) during the year under review. This comprised exclusively fixed remuneration.

## Vested remuneration claims of persons holding key positions within the Group (senior management)<sup>1)</sup>

in € thousand						2018	2017
	Short-term benefits	Post-employment benefits	Other long-term benefits	Termination benefits	Share-based payments	Total	Total
<b>Total</b>	<b>9,174</b>	<b>2,182</b>	<b>665</b>	<b>–</b>	<b>1,284</b>	<b>13,305</b>	<b>14,623</b>

<sup>1)</sup> Reporting follows the "vesting principle", disclosing those remuneration components which were vested during the relevant 2018 reporting period.

## Pension obligations to persons holding key positions within pbb Group (senior management)

in € thousand	31.12.2018	31.12.2017
<b>Total<sup>1)</sup></b>	<b>77,752</b>	<b>80,172</b>

<sup>1)</sup> Including €57,812 thousand (2017: €61,204 thousand) for pensioners and their surviving dependants.

## Disclosure by pbb Pursuant to Section 314 No. 6 of the HGB, by Groups of Individuals

### Remuneration paid to Management Board members of pbb

in € thousand	2018 <sup>1)</sup>	
	Remuneration	Total
Management Board members who were in office during the financial year 2018	2,341	2,341
Management Board members who retired prior to the financial year 2018	–	–
<b>Total</b>	<b>2,341</b>	<b>2,341</b>

<sup>1)</sup> In 2017 a remuneration of €2,557 thousand was paid to Management Board members who were in office during the 2017 financial year. Management Board members who retired prior to the year 2017 did not receive any remuneration in the 2017 financial year.

As of the balance sheet date, there were no receivables to related persons from loans or advances or other commitments.

### Provisions for pensions

in € thousand	2018 <sup>1)</sup>	
	Additions/ reversals	Total
Management Board members who were in office during the financial year 2018	1,425	7,074
Management Board members who retired prior to the financial year 2018	-3,392	57,812
<b>Total</b>	<b>-1,967</b>	<b>64,886</b>

<sup>1)</sup> Provisions for pensions recognised for Management Board members who were in office during the financial year 2017 amounted to €5,649 thousand. Provisions for pensions recognised for Management Board members who retired prior to the 2017 financial year amounted to €61,204 thousand as at 31.12.2017.

### Remuneration paid to Supervisory Board members

in € thousand	2018 <sup>1)</sup>
	Total fixed remuneration
Supervisory Board members who were in office during the financial year 2018	690
Supervisory Board members who retired prior to the financial year 2018	-
<b>Total</b>	<b>690</b>

<sup>1)</sup> Board members who were in office during the 2017 financial year totalled €694 thousand. Supervisory Board members who retired prior to the year 2017 did not receive any remuneration in the 2017 financial year.

The remuneration of the Management Board and the Supervisory Board members for their respective Board activities (including the corresponding tables) is disclosed in the Remuneration Report on an individual basis. Except for employee representatives to the Supervisory Board, who are remunerated by pbb under their individual employment contracts, the members of pbb's Supervisory Board did not receive any remuneration for personal services, as defined in section 5.4.6 of the German Corporate Governance Code, during 2018.

### Statement According to Article 19 MMV

According to pbb's knowledge, the members of the Management Board and the Supervisory Board as well as persons closely related to these members did not hold any shares of the Company in a reportable extent as at 31 December 2018 and as at 31 December 2017. In the years 2018 and 2017, according to pbb's knowledge, no pbb shares or derivatives relating to such shares in a reportable extent were acquired or sold by members of the Management Board and the Supervisory Board or by persons closely related to such members.

### Amount of cash-settled share-based payment transactions

The total amount of outstanding virtual shares in relation to the share-based payment arrangements changed as follows:

#### Amount of cash-settled share-based payment transactions

Quantity (number)	2018	2017
Balance (outstanding) at 1.1.	59,090	–
granted during the reporting period	104,240	59,090
expired during the reporting period	–	–
exercised during the reporting period	23,630	–
Balance (outstanding) at 31.12.	139,700	59,090
of which: exercisable	–	–

The fair value of the virtual shares granted during the reporting period amounted to €1 million (2017: €1 million) as at the balance sheet date.

The virtual shares exercised during the reporting period were converted at a weighted average price of the pbb share of €14.11 (2017: €9.71).

The total amount expensed for share-based payment transactions during the financial year 2018 was €1 million (2017: €1 million). A detailed breakdown of the share in total expenses attributable to the members of the Management Board is included in the Remuneration Report.

An amount of €0 million (2017: €0 million) was expensed for former members of the Management Board.

The intrinsic value of the virtual shares exercisable at the reporting date amounted to €0 million (2017: €0 million), since there were no exercisable virtual shares at that date. The obligation from share-based payment transactions as at 31 December 2018 amounted to €1 million (2017: €1 million). It is reported in the statement of financial position under provisions.

## 81 Employees

#### Average number of employees

	2018	2017
Employees (excluding apprentices)	786	777
Thereof: senior staff in Germany	19	18
<b>Total</b>	<b>786</b>	<b>777</b>

## 82 Members of the Supervisory Board and of the Management Board

### Supervisory Board of pbb in financial year 2018

Name and place of residence Function in Supervisory Board	Principal occupation Functions in the Committees of the Supervisory Board	Supervisory Board memberships and other directorships in 2018
<b>Dr Günther Bräunig</b> Frankfurt/Main, Germany Chairman	<b>CEO of KfW</b> Chairman of the Executive and Nomination Committee and of the Remuneration Committee, Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee (until 21.6.2018)	<b>True Sale International GmbH, Frankfurt/Main, Germany</b> – Chairman of the Shareholder's Advisory Board (until 30.4.2018) <b>Deutsche Post AG, Bonn</b> – Member of the Supervisory Board (since 17.3.2018) <b>Deutsche Telekom AG, Bonn</b> – Member of the Supervisory Board (since 21.3.2018)
<b>Dagmar Kollmann</b> Vienna, Austria Deputy Chairman	<b>Entrepreneur</b> Chairman of the Audit Committee, Member of the Executive and Nomination Committee and of the Remuneration Committee and of the Risk Management and Liquidity Strategy Committee (since 21.6.2018)	<b>Deutsche Telekom AG, Bonn, Germany</b> – Member of the Supervisory Board <b>KfW IPEX-Bank GmbH, Frankfurt/Main, Germany</b> – Member of the Supervisory Board <b>Bank Gutmann AG, Vienna, Austria</b> – Member of the Supervisory Board <b>Unibail-Rodamco SE, Paris, France</b> – Member of the Supervisory Board
<b>Dr Jutta Dönges</b> Frankfurt/Main, Germany Member (since 21.6.2018)	<b>Executive Board Member of Bundesrepublik Deutschland – Finanzagentur GmbH</b> Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee (since 21.6.2018)	<b>FMS Wertmanagement AöR, Munich, Germany</b> – Deputy Chairman of the Supervisory Board <b>Erste Abwicklungsanstalt AöR, Düsseldorf, Germany</b> – Member of the Supervisory Board <b>Eurex Clearing AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board (since 27.6.2018)
<b>Dr Thomas Duhnkrack</b> Kronberg/Taunus, Germany Member	<b>Entrepreneur</b> Member of the Audit Committee	<b>Hauck &amp; Aufhäuser Privatbankiers AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board
<b>Dr Christian Gebauer-Rochholz</b> Hochheim, Germany Employee Representative	<b>Bank employee</b>	–
<b>Georg Kordick</b> Poing, Germany Employee Representative	<b>Bank employee</b>	–
<b>Joachim Plesser</b> Ratingen, Germany Member	<b>Consultant</b> Chairman of the Risk Management and Liquidity Strategy Committee, Member of the Executive and Nomination Committee and of the Remuneration Committee	<b>Commerz Real Investmentgesellschaft mbH, Wiesbaden, Germany</b> – Member of the Supervisory Board <b>DIC Beteiligungs AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board <b>GEG German Estate Group AG, Frankfurt/Main, Germany</b> – Member of the Supervisory Board <b>Pandion AG, Cologne, Germany</b> – Chairman of the Supervisory Board
<b>Oliver Puhl</b> Frankfurt/Main, Germany Member	<b>Entrepreneur</b> Member of the Risk Management and Liquidity Strategy Committee	–
<b>Heike Theißing</b> Munich, Germany Employee Representative	<b>Bank employee</b> Member of the Remuneration Committee	–
<b>Dr Hedda von Wedel</b> Andernach, Germany Member (until 21.6.2018)	<b>President of the Bundesrechnungshof (retired)</b> Member of the Audit Committee and of the Risk Management and Liquidity Strategy Committee (until 21.6.2018)	–

### Management Board of pbb in financial year 2018

Name and place of residence	Function in the Management Board	Supervisory Board memberships
<b>Andreas Arndt</b> Munich, Germany	CEO/CFO	–
<b>Thomas Köntgen</b> Frankfurt/Main, Germany	Deputy CEO Treasury and Real Estate Finance	–
<b>Andreas Schenk</b> Dreieich, Germany	CRO	–

## 83 Holdings of pbb

### Holdings of pbb as of 31 December 2018

Additional statement according to HGB Name Place of business and country	Purpose of business	Interest in %			Currency	Equity in thousands	Net income/ loss in thousands
		Total (Sec 16 (4) Aktien- gesetz)	Of which held indirectly	Differing voting rights in %			
<b>Consolidated companies</b>							
CAPVERIANT GmbH Munich, Germany	Marketplace of municipal finance	100.00	–	–	EUR	6,138	–5,144
Immo Immobilien Management Beteiligungsgesellschaft mbH i.L. Munich, Germany	Real estate company	100.00	–	–	EUR	7	–
IMMO Invest Real Estate GmbH <sup>1)</sup> Munich, Germany	Salvage acquisition	100.00	–	–	EUR	8,448	–
<b>Associated companies not measured at equity due to minor significance</b>							
SANO Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Dresden KG <sup>2)</sup> Dusseldorf, Germany	Model of bank holding	33.33	–	25.00%	EUR	–676	737
SOMA Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Darmstadt KG <sup>2)</sup> Dusseldorf, Germany	Model of bank holding	33.33	–	25.00%	EUR	–6,762	2,103

<sup>1)</sup> Profit transfer by shareholders on the basis of profit and loss transfer agreement.

<sup>2)</sup> Financial figures from the financial year 2017.

## 84 Country-by-Country Reporting

The requirements of Article 89 of EU Directive 2013/36/EU (Capital Requirements Directive CRD IV) concerning to so-called Country-by-Country Reporting were endorsed in German law by Section 26a KWG (German Banking Act). In financial years 2018 and 2017 no entity respectively no branch of pbb received public subsidies. On 31 December 2018, the ratio of net profit and total balance sheet of pbb Group was 0.3% (31 December 2017: 0.3%). The further figures required by Section 26a KWG are disclosed in the following table:

### Country-by-Country Reporting (Additional statement according to Section 26a KWG)

31 December 2018

Type of business	Country	Number of employees <sup>1)</sup>	Turnover <sup>2)3)</sup> (in € million)	Income/loss before tax <sup>3)</sup> (in € million)	Income taxes <sup>3)</sup> (in € million)
<b>Deposit taking credit institution</b>					
Deutsche Pfandbriefbank AG, Munich	Germany	614	417	197	-41
<b>Branch of a deposit taking credit institution</b>					
Deutsche Pfandbriefbank AG, London branch	United Kingdom	58	20	7	-1
Deutsche Pfandbriefbank AG, Madrid branch	Spain	14	4	-	-
Deutsche Pfandbriefbank AG, Paris branch	France	42	23	11	7
Deutsche Pfandbriefbank AG, Stockholm branch	Sweden	9	8	6	-1
<b>Representative office of a deposit taking credit institution</b>					
Deutsche Pfandbriefbank AG, representative office New York	USA	4	1	-1	-
<b>Provider of ancillary services</b>					
CAPVERIANT GmbH, Munich	Germany	9	-2	-5	-
Immo Immobilien Management Beteiligungsgesellschaft mbH i.L., Munich	Germany	-	-	-	-
IMMO Invest Real Estate GmbH, Munich	Germany	-	-	-	-

<sup>1)</sup> Full-time equivalents not including apprentices, interns/working students and short-term employees with fixed terms < 1 year.

<sup>2)</sup> Operating income as turnover equivalent.

<sup>3)</sup> Figures before consolidation.

## 85 Report on Post-balance Sheet Date Events

The Supervisory Board appointed Marcus Schulte as a member of the Management Board with effect from 1 January 2019.

Apart from the above, there were no significant events after 31 December 2018.

Munich, 26 February 2019

Deutsche Pfandbriefbank AG  
The Management Board



Andreas Arndt



Thomas Köntgen



Andreas Schenk



Marcus Schulte

# Responsibility Statement

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

Munich, 26 February 2019

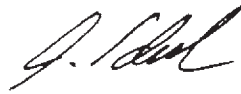
Deutsche Pfandbriefbank AG  
The Management Board



Andreas Arndt



Thomas Köntgen



Andreas Schenk



Marcus Schulte



# Independent Auditor's Report

To Deutsche Pfandbriefbank AG, Munich

## REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE COMBINED MANAGEMENT REPORT

### Opinions

We have audited the consolidated financial statements of Deutsche Pfandbriefbank AG, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January 2018 to 31 December 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the management report of Deutsche Pfandbriefbank AG and the Group (combined management report) for the financial year from 1 January 2018 to 31 December 2018. In accordance with the German legal requirements we have not audited the content of the corporate governance statement which is included in the "corporate governance statement/corporate governance report" section of the combined management report.

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

- > the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2018, and of its financial performance for the financial year from January 1 to December 31, 2018, and
- > the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the content of the corporate governance statement mentioned above.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

### Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance

with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

### Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

#### Determination of stage 3 risk provisions for the Real Estate Finance segment

For the accounting policies and assumptions applied, please refer to the disclosures in the notes, section 7 "Recognition of impairment losses)".

#### The Financial Statement Risk

The Deutsche Pfandbriefbank Group applied the new international financial reporting standard IFRS 9 Financial Instruments in accordance with requirements for the first time at the beginning of financial year 2018. One of the main new features of IFRS 9 is that the measurement of provisions for expected credit losses is generally based on probability-weighted scenarios and consequently this also applies to debt instruments with a deterioration in credit quality (so-called stage 3 risk provisions). In this context, the influence of macroeconomic factors on credit risk must also be taken into account. Deutsche Pfandbriefbank Group's lending operations almost exclusively consist of large-scale commercial real estate financing for which the Deutsche Pfandbriefbank Group determines risk provisions on a case-by-case basis.

As at 31 December 2018, Deutsche Pfandbriefbank Group's loan loss provisions amounted to EUR 107 million (1 January 2018: EUR 94 million). Of this amount, EUR 56 million (1 January 2018: EUR 39 million) is attributable to stage 3 risk provisions for the Real Estate Finance segment. This increase in stage 3 risk provisions in the amount of EUR 17 million is due – compensated by reducing effects – in the amount of EUR 19 million (net) to changes in credit risk.

Determining the number and nature of scenarios, deriving the cash flows expected in each scenario and estimating the probabilities of occurrence requires considerable judgement.

Therefore it was of particular importance for our audit that the number of scenarios considered was consistent with the complexity of the conditions determining the individual credit risks including the dependence on macroeconomic factors. We also considered it important that the selection of specific scenarios, estimates of probabilities for each scenario and estimates of cash flows expected in each scenario were verifiably, justifiably and consistently performed and documented.

### Our Audit Approach

Based on our risk assessment and evaluation of the risks of material misstatement, we used both control-based and substantive audit procedures for our audit opinion. We therefore performed the following audit procedures, among others:

In a first step, we gained a better understanding of the performance of the credit portfolio, the associated credit risks and the internal control system with regard to identifying, controlling, monitoring and evaluating credit risks for the credit portfolio.

Our audit included system and compliance testing of the internal control system with particular focus on assessing the internal financial reporting approach with regard to measuring loans with a deterioration in credit quality and with regard to the number, derivation and evaluation of scenarios.

For the IT systems and individual data processing systems used, we first verified the effectiveness of rules and procedures relating to numerous IT applications and supporting the effectiveness of application controls, with the involvement of our IT experts.

Based on these findings, we also assessed, within the scope of our selection of credit exposures defined in accordance with risk and materiality criteria, whether the number and nature of the scenarios selected as well as the probabilities allocated to these scenarios were appropriate. In doing so, we took into account the complexity of each loan commitment and the factors likely determining further exposure to risk and considered whether the assumptions underlying the scenarios were consistent with the forecasts of general macroeconomic conditions used at Deutsche Pfandbriefbank Group.

We then assessed the cash flows derived for the scenarios including the payment dates assumed. Our assessment included an evaluation of collateral depending on the exposure strategy pursued by the Deutsche Pfandbriefbank Group.

For the purposes of impairment-testing of the underlying collateral, we used appraisals from independent experts for our opinion as well as publicly available data to assess whether the assumptions used for the expert opinions were properly derived. We also confirmed the competence, professional skills and impartiality of the experts, particularly on the basis of interviews, inspection of their assignment, and publicly available information on the experts engaged.

Lastly, we verified that the value of expected credit losses was accurately calculated.

### Our Observations

Based on our audit of a selection of credit exposures that were allocated to stage 3 risk provisions in the Real Estate Finance segment, we found that the judgements in selecting specific scenarios, estimates of probabilities for each scenario and estimates of cash flows expected in each scenario were verifiably, justifiably and consistently performed and documented.

**Assessment of the allocation of losses relating to the securitised transaction  
"Estate UK-3" to be taken into account in measuring provisions for expected credit  
losses pursuant to IFRS 9**

Please refer to section 62 "Provisions" of the notes and the "Forecast" section of the combined management report for the risks relating to the securitised transaction Estate UK-3.

**The Financial Statement Risk**

Deutsche Pfandbriefbank AG, the legal successor of Hypo Real Estate Bank International AG, Stuttgart, issues credit linked notes in connection with the securitised transaction Estate UK-3. These credit linked notes secure the credit risk of a UK credit portfolio of Deutsche Pfandbriefbank AG, provided the requirements for loss allocation in accordance with the terms of the credit linked notes are fulfilled. A default affecting one of the hedged exposures (Reference Claim No 3) has caused a loss of approximately GBP 113 million, and a request has been made by Deutsche Pfandbriefbank AG to allocate this loss to the credit linked notes. The trustee of the transaction has raised doubts as to the permissibility of loss allocation and has appointed an expert who will decide on whether the loss allocation is justified.

Material judgements are exercised in relation to Estate UK-3, particularly with regard to the legal assessment of the prospects of success of the loss allocation request during the expert proceedings. Based on opinions provided by legal firms, Deutsche Pfandbriefbank Group as at 31 December 2018 assumed that the contract terms and conditions were fulfilled and consequently that the expert will confirm the permissibility of loss allocation.

There is a risk for the consolidated financial statements if the judgements in relation to the prospects of success of allocating losses are not properly taken into account when measuring provisions for expected credit losses.

**Our Audit Approach**

Our risk assessment and evaluation of the risks of material misstatement are based in particular on an assessment of the adequacy of internal control with regard to credit risk and our understanding of the transaction and its legal basis. As a result, our opinion was based on substantive audit procedures. We therefore performed the following audit procedures, among others:

We obtained and used confirmations from lawyers who were commissioned by the Bank to provide a legal assessment of the prospects of success of the requested loss allocation. We also confirmed the competence, professional skills and impartiality of these lawyers based on interviews conducted with Deutsche Pfandbriefbank AG's management as well as publicly available information on the lawyers engaged. We also tasked experts of KPMG Rechtsanwalts GmbH with assessing the prospects of success and included their opinion in our evaluation of Deutsche Pfandbriefbank AG's assessment of the prospects of success.

### Our Observations

The judgements exercised as at 31 December 2018 were reasonable with respect to the prospects of success of allocating losses for measuring provisions for expected credit losses in relation to Reference Claim No 3.

### Other Information

Management is responsible for the other information. The other information comprises:

- > the corporate governance statement and
- > the remaining parts of the annual report, with the exception of the audited consolidated financial statements and combined management report and our auditor's report.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, consider whether the other information

- > is materially inconsistent with the consolidated financial statements, with the combined management report or our knowledge obtained in the audit, or
- > otherwise appears to be materially misstated.

### Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- > Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- > Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- > Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- > Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- > Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- > Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- > Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- > Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

## OTHER LEGAL AND REGULATORY REQUIREMENTS

### Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 21 June 2018. We were engaged by the chairperson of the audit committee of the supervisory board on 22 November 2018. We have been the group auditor of Deutsche Pfandbriefbank AG and its legal predecessors without interruption for more than 20 years.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

### GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Andreas Dielehner.

Munich, 27 February 2019

KPMG AG  
Wirtschaftsprüfungsgesellschaft

**Winner**

Wirtschaftsprüfer  
[German Public Auditor]

**Dielehner**

Wirtschaftsprüfer  
[German Public Auditor]



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# Non-financial Report

Pursuant to sections 315b-c in connection with section 289b-e of the German Commercial Code (HGB), Deutsche Pfandbriefbank AG (pbb) has published this separate, combined non-financial report, prepared in line with the German Sustainability Code (DNK) and in accordance with the requirements of the German CSR Directive Implementation Act (CSR-Richtlinie-Umsetzungsgesetz).

## SUSTAINABILITY STRATEGY

pbb is a leading specialist bank for commercial real estate finance and public investment finance in Europe and the US. As a financing partner for the real estate industry and the public sector, the Bank holds an important real economic and macroeconomic function. At the same time, pbb ranks amongst the largest issuers of Pfandbriefe (German covered bonds), and is thus also a key issuer of covered bonds in Europe. This way, pbb bundles funds for granting loans, and transforms illiquid loans with concentrated risks into investment opportunities with a diversified risk structure and a high degree of fungibility. For details on the Group structure, business model and business strategy, please refer to the section on Fundamental Information about the Group in pbb Group's Combined Management Report 2018.

When carrying out its business activities, pbb Group is responsible for its environment:

- > Employees
- > Clients and banking partners
- > Equity and debt investors
- > Service providers and suppliers
- > Society and the environment.

Sustainability is our guiding principle. pbb Group defines sustainability as the self-conception, that its own actions provide an essential contribution to securing a long-term future and to consider the consequences for all stakeholders and the environment. pbb Group is convinced that law-abiding and honest conduct, responsible corporate governance, and adherence to high ethical principles are essential prerequisites for sustainability. pbb Group's aims to combine ongoing economic success with sustainability aspects in the best way possible, thereby creating long-term value for all stakeholders, establishing benefits to society, and protecting natural resources. Given ongoing changes of markets and stakeholder requirements, pbb Group deems a regular and open dialogue to be essential for identifying the needs of all stakeholder groups at an early stage, and being able to include these needs in decision-making processes.

For pbb Group, the active support of the development process towards sustainability is of special concern. That is why pbb Group's sustainability strategy is designed to continuously strengthen and extend sustainability awareness by implementing appropriate measures, as well as embedding sustainability aspects as an integral element within the company. The sustainability strategy focuses on aspects which, on the one hand, have a material impact on the Bank's business activities and business success, and which pbb Group, on the other hand, can significantly influence itself. Such relevant aspects are determined via a materiality analysis on an annual basis.

In 2018, the CSR Committee, which is pbb's prevailing body for advancing its sustainability strategy, decided to optimise pbb Group's sustainability strategy by taking into account the Sustainable Development Goals (SDGs) – with the goal to support sustainable growth, and thus to actively shape a successful future by creating a solid basis.

## Strategy

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In a first step, the SDGs were prioritised and split into three groups: SDGs where pbb Group is able to make a strong positive contribution, SDGs where pbb Group is able to make a direct or indirect positive contribution and SDGs where pbb Group is able to avoid negative implications.

Against this background, four SDGs were identified to be relevant for the increase of the Group's contribution to sustainability. These four SDGs are covered in more detail below:

### Laying a solid foundation

To be able to deliver solid economic results in the long term, laying a strong foundation is paramount. Sustainable success needs thorough groundwork. That is why action is required to strengthen – and deepen – core areas of expertise. As regards the SDGs, pbb Group can make a strong positive contribution looking at gender equality, as well as industry, innovation and infrastructure.



#### Gender equality

In its Code of Conduct (published online at [www.pfandbriefbank.com/unternehmen/corporate-responsibility.html](http://www.pfandbriefbank.com/unternehmen/corporate-responsibility.html)), pbb Group has committed itself to respect all people, irrespective of age, sex, race, social background, skills, sexual orientation or religion, which is intrinsically linked with the principle of equal opportunity and thus with that of gender equality. This is being supported by an increased awareness across all levels, the establishment of a corresponding management and corporate culture, and the internal obligation to specifically address the under-represented gender for the given situation when filling vacant positions, whilst taking suitability and qualifications into account.



### Industry, innovation and infrastructure

pbb Group contributes substantially by the financing of commercial real estate and public infrastructure. Commercial Real Estate Finance is certainly about creating housing and office space, but it is also about providing for local supply centres. In Public Investment Finance, the focus is on municipal housing, utilities and waste management, healthcare and nursing care properties, as well as childcare and educational facilities. In addition, pbb Group is active in the publicly-guaranteed export finance business.

### Fostering sustainable growth

As pbb Group is committed to long-term and substantial success, it emphasizes healthy and sustainable growth. A core element to this is making sure people are working under humane conditions.



### Decent work and economic growth

pbb's business model requires highly qualified employees with expert knowledge. Therefore, the key objective is the attraction, retention and long-term development of highly qualified employees with deep knowledge, customer focus, leadership skills at line functions or within projects, a high degree of willingness to be flexibly employed and of entrepreneurial behaviour. pbb Group respects all people, independent of age, sex, race, social background, skills, sexual orientation or religion. No forms of unfair treatment or discrimination will be tolerated. All employees are bound by the Code of Conduct, which provides transparency to each member of staff with regards to requirements that are deemed indispensable by pbb Group. pbb maintains an internal office that employees may turn to in case they feel discriminated pursuant to the German General Act on Equal Treatment.

Also within the value chain it is crucial to create conditions that ensure a safe working environment. This not only applies to service providers and suppliers, but also to the lending business itself. Labour laws must be safeguarded, and the good working conditions must be ensured. pbb Group provides for that – not only with the Know Your Customer (KYC) process for clients and business partners, but also in its core business in the context of valuations by internal or external appraisers.

Markets, technologies, and – as a consequence – society are experiencing ever faster and greater changes. To live up to these changes, it is important to create suitable conditions in order to ensure sustainable growth. pbb Group has committed itself to identify changes and trends, and react accordingly. One example for this is the digital transformation, which targets customer interfaces, internal processes as well as new products and services.

### Shaping a successful future

Shaping and securing the future and the prosperity for the next generations is quite a challenge; there are also ecological aspects to it, such as the preservation of natural resources.



### Sustainable cities and communities

As a leading European specialist bank for real estate finance and public-sector investment finance, pbb Group is contributing to the establishment of sustainable cities and communities. It is necessary to develop urban living spaces with a functional infrastructure contributing to improving the standard of living. In addition, the building structures themselves need to be considered.

Therefore, pbb Group engages, inter alia its involvement in various working groups that focus on developing sustainability standards in order to help safeguard natural resources and permanently minimise the ecological footprint.

### CSR Committee and Corporate Governance Officer

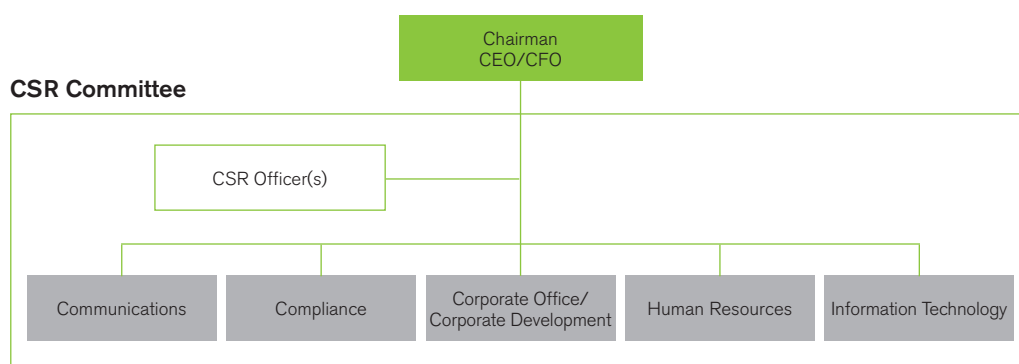
Established in 2017, the CSR Committee is a vital instrument for embedding sustainability topics in pbb Group. Internal rules of procedure determine the purpose and scope of action of the Committee.

The Management Board appoints the CSR Committee members. The Committee is comprised of the division heads of Communications, Compliance, Corporate Office/Corporate Development, Human Resources, Information Technology and the CSR Officer(s) appointed by the CSR Committee.

Membership is linked to the respective function, ensuring that the different divisions are always effectively represented within the Committee. The division head of Communications is the chairman of the CSR Committee.

The chief responsibility of the CSR Committee is to develop a sustainability strategy, and to monitor its implementation. In addition, it determines sustainability targets and the measures necessary to achieve them. Within the scope of an ordinary meeting, held at least once a year, the CSR Officer(s) provide(s) information about current legal developments and market requirements, as well as about the status of implementation and the level of completion of measures and targets determined. Based on this, the CSR Committee may approve new measures and targets where appropriate. Furthermore, on an ad hoc basis, resolutions may be passed in an extraordinary process. The CSR Committee generally follows the principle of materiality when assessing and prioritising measures and targets.

Minutes shall be prepared for any and all meetings. The Management Board shall be informed about the date and time of the meetings in a timely manner, and may attend them if desired. Furthermore, the Management Board may obtain additional reports and recommendations from the CSR Committee at any time.



Andreas Arndt (CEO/CFO) – responsible for any and all issues regarding the implementation of corporate governance provisions and standards, and the monitoring of their compliance within the Management Board – is Corporate Governance Officer at Management Board level.

### Incentive system

The remuneration system is another vital instrument for deeply embedding sustainability topics in pbb Group. As per its structure, the remuneration system explicitly considers the sustainable development of pbb Group. The focus lies on the economic success of the company (for further details, please refer to the Remuneration Report in the Combined Management Report 2018).

### MATERIALITY ANALYSIS

Already in 2017, pbb Group carried out a materiality analysis to identify those aspects of sustainability that are material for pbb Group and its stakeholders. The analysis was updated in 2018.

In its meeting on 12 October 2018, the CSR Committee reviewed the stakeholder groups that had been identified as material during the stakeholder analysis conducted for the non-financial report 2017 to see whether they were still up to date, and declared them to be equally valid for the non-financial report 2018.

### Stakeholder



The same applies to the topics and aspects considered to be material; these were reviewed based on a so-called "long list". In addition to the general topics environment, employee matters, social concerns, and corporate governance, particular emphasis was placed once more on the identification of industry-specific and pbb Group-specific aspects. The assessment of the topics and aspects with regard to their business relevance and their impact on the Bank's business activities, as well as their position in the value chain, did not change on the previous year, which is why the CSR Committee affirmed them for the non-financial report 2018.

The aspects identified as relevant for pbb Group were assessed with regard to their materiality. pbb Group's CSR Officers assessed the business relevance and the impact on business activities according to the German CSR Directive Implementation Act (CSR-Richtlinie-Umsetzungsgesetz). The relevance for individual stakeholder groups was determined via the simulation of stakeholder roles, performed by pbb Group employees. The employees involved represented different areas and various functions with close contact to the relevant stakeholders. They were thus able to see things from the respective stakeholders' view in the best way possible.

The results of the materiality analysis were presented to and discussed within the CSR Committee. Minor deviations from the previous year occurred, however without impact on the thresholds relevant for determining materiality.

The following topics and aspects were identified as material for pbb Group's non-financial report:

Topics	Aspects
Industry-specific aspects	Client orientation Sustainable financing solutions Risk management
Corporate Governance	Compliance Human rights
Employee matters	Remuneration and employee benefits Working environments Training and continuing professional development
Environment	Mobility

Social concerns were identified as non-material within the scope of our materiality analysis.

Regarding the influence on pbb Group's business activities, the ability of pbb Group to influence the aspects, as well as regarding the stakeholder relevance, the materiality analysis yielded the following results:

Industry-specific aspects, corporate governance aspects and employee matters have the largest impact on pbb Group's business activities, whilst the impact of environmental aspects is comparatively small due to the business model. The most important industry-specific aspects are client orientation and sustainable financing solutions, as well as sustainable risk management. These aspects significantly impact the business activities of pbb Group. At the same time, it is precisely these topics or aspects that can be influenced most effectively by pbb Group itself. The same applies to corporate governance aspects, compliance, and human rights. Amongst employee matters, the following aspects bear the highest relevance: the working environment, training and continuing professional development, and employee benefits. Even though the named aspects also have a significant impact on the Bank's business activities, pbb Group only recognises limited possibilities of influence. With regard to environmental issues, the topic of mobility was the only aspect to be considered relevant. However, the impact on business activities is rather low, as are the possibilities of pbb Group to exert influence on this topic. Stakeholders considered the aspects Compliance and Risk Management to be especially relevant, whilst the relevance of all other topics was only classified as medium.

In addition, within the framework of the materiality analysis, the essential aspects along the value chain were categorised, and the potential influence of pbb Group along this chain was assessed. pbb Group provides a large part of the entire value chain within commercial real estate finance and public investment finance itself, primarily procuring the funds for the lending business by issuing

Pfandbriefe and unsecured bonds, as well as with its retail deposit-taking business with private clients. In the lending business, pbb Group initiates business transactions, provides loan coverage along the entire loan lifecycle up until loan repayment, or, if applicable, the realisation of collateral. Therefore, pbb Group sees the largest potential influence here.

Potential influence on up- and downstream activities of the value chain, on the other hand, are limited to only a few aspects. Upstream activities are especially services rendered by suppliers and service providers. Due to pbb Group's business model, these activities are, however, of only minor significance. The human rights aspect is material for pbb Group; nevertheless, the Bank sees few possibilities for influence. The key downstream activities include especially the use and further utilisation of real estate objects and infrastructure projects financed by pbb Group. In this case, pbb Group recognises a high level of potential influence by implementing sustainable financing solutions.

For 2019, the CSR Committee decided to explicitly involve stakeholder groups.

## **RISKS AND OPPORTUNITIES**

Should pbb Group fail to appropriately take the sustainability aspects categorised as material into consideration, or even ignore them, especially financial and social risks would arise. Ecological risks play merely a minor role.

Financial risks result mainly from the following topics: employee matters, corporate governance, and industry-specific aspects. At the same time, this is the area with the greatest opportunities for pbb Group. The qualifications and satisfaction of our employees are the main foundation for the quality of their work, and thus for the Company's potential. In the case of corporate governance, pbb Group focuses mainly on potential financial damage resulting from Compliance effects, whereas in the case of industry-specific aspects, financial damage may occur due to all material aspects. Client orientation is a fundamental success factor for pbb Group in order to secure the financing portfolio; sustainable financing solutions reduce the credit default probability and increase the value of the collateral; risk management is a central monitoring and management system. It is however particularly the industry-specific aspects which allow pbb Group to positively stand out from its competitors in a direct comparison.

Potential financial risks along the value chain arise especially in connection with the own business activities; however, they also occur downstream with regard to sustainable financing solutions – by the construction and use of financed real estate objects and infrastructure projects.

pbb Group recognises social risks, mainly in relation to corporate governance and industry-specific aspects. Focus is especially laid on reputational risks, as reputational damage can have significant adverse effects on pbb Group's sustainable business success. Along the value chain, potential social risks are mainly related to own business activities; on the other hand, pbb Group classifies risks from upstream activities provided by suppliers and service providers as low.

pbb recognises ecological risks, particularly in relation to industry-specific aspects, and especially within the scope of sustainable financing solutions. Risks arising from non-sustainable construction and use of financed real estate objects and infrastructure projects are in focus, i.e. the potential ecological risks are primarily downstream of the own business activities along the value chain



pbb Group's sustainability strategy is designed to minimise sustainability risks to the greatest extent possible, whilst making use of the opportunities arising.

In the following, we will illustrate the material sustainability topics and aspects.

## **INDUSTRY-SPECIFIC ASPECTS**

### **Client orientation**

pbb Group's clients are fundamental to its business. Therefore, clients' needs are at the core of pbb Group's business activities, and we continuously strive to reach the best possible balance between client demands and our own interests.

Client orientation is a key success factor for pbb Group in order to generate a business portfolio – through new commitments and loan extensions – that matches the Group's risk and return profile. For pbb, client orientation goes beyond processes and structures – it is the top priority in the every-day business of every employee, and a way of life. In this context, the following aspects are crucial: client dialogue, client proximity, and a relationship based upon trust between pbb Group and its clients.

pbb Group maintains a regular and intensive exchange of views with its clients in order to identify their needs, be it in one-on-one talks in the context of long-standing business relationships, or at events. For instance, pbb regularly attends the real estate trade fairs MIPIM in Cannes and Expo Real in Munich. Moreover, pbb organises regular events for clients in commercial real estate finance and public investment finance. In 2018, pbb Group held client events in Germany, France, the United States, Sweden and the United Kingdom, with a total of around 1,500 attendees – including professional real estate clients and experts, as well as public investment finance clients. pbb plans to organise similar client events in 2019.

Every market has its own local idiosyncrasies. Detailed knowledge about individual market conditions and developments allows pbb to better understand client needs, and to hold an in-depth dialogue with its clients. In order to stay up to date, pbb maintains a comprehensive network of sales offices in Germany and other important locations throughout Europe. Overall, pbb Group maintains nine local sales offices. Following re-entry into the US market, a representative office was therefore opened in New York in 2018.

Besides its strong local presence, pbb also features expert teams for selected real estate financing aspects, in particular property development, logistics, retail and residential topics, hotels – as well as real estate for social purposes. 2018 saw a new expert team being established: Real Estate Asset Management. This team is responsible for compiling and transferring knowledge and information on real estate asset management to support pbb Group's digitalisation offensive. The purpose of this – and other teams – is to integrate existing know-how within the Bank, to build up more in-depth knowledge in a targeted manner, and to provide expert opinions when needed. The teams consist of experts from different areas of specialisation, and are staffed internationally. Among their regular members are employees from Real Estate Finance, Credit Risk Management, Property Analysis & Valuation, and from the Legal department. The competent decision-making bodies may resolve that the respective expert teams become involved in certain new business processes as consultants, or to provide expert opinions on certain aspects. The Developments and Hotels expert teams get involved at an early stage, immediately after the New Deal Committee (NDC) approves the respective deal.

Based on its profound market and product knowledge, pbb Group enters into a highly specialised dialogue with its clients, aiming at individual and tailor-made financial solutions. Given the early involvement – and structural embedding – of Risk Management (for further details, please refer to the Risk and Opportunity Report in pbb Group's Combined Management Report 2018) and the Property Analysis & Valuation department for real estate valuation purposes, pbb intends to identify, and mitigate, potential risks at an early stage.

Client confidence plays another crucial role in pbb's business activities. As a prerequisite, pbb Group implements the necessary security standards in order to ascertain confidentiality of information about clients, and of all transaction data (cf. the chapter "Data protection"). Since its establishment, pbb Group has used a Code of Conduct, which comprises the non-negotiable requirements that pbb expects from all its employees when dealing with clients, or other stakeholders. The Code of Conduct provides more than just guidance – it is a binding part of each employee's employment contract, and forms the basis for all other framework regulations within pbb Group.

The Code of Conduct is implicitly applied to all clients, prospective clients or other business partners (e.g. suppliers). Should an employee become aware of any indications that a client, prospective client or other business partner (e.g. a supplier) may be involved in illegal activities, or activities that could damage our reputation, he must inform the competent member of the Management Board as well as Compliance. The competent member of the Management Board will initiate a review of every single case – in cooperation with Compliance, and other divisions, if required (such as Internal Audit, Legal, or the Credit department).

In 2014, pbb Group introduced a new purchase guideline designed to streamline purchase processes, and established the so-called Compliance Caution Framework (CCF Scout). CCF Scout is used as an IT-based search engine to check business partners, counterparties, purchasers or suppliers for entries or any sort of conspicuous features immediately, and at an early stage, before new business is generated or an existing business relationship is extended. CCF Scout entries have been collected by a respected external service provider, which draws upon worldwide sanctions lists collated from publicly available sources, such as the EU, OFAC, or the German Bundesbank. Furthermore, CCF Scout comprises relevant information from press releases and media content.

Regarding client confidence, fair treatment is another crucial factor. pbb Group is committed to openness, professionalism and excellence when providing services to clients.

This also includes a high performance standard as well as appropriate and effective complaints management that ensures the efficient, targeted and rapid processing of complaints. Complaints received not only offer the chance to amend mistakes, and to restore client satisfaction – they also provide important clues to organisational weaknesses. Therefore, pbb Group takes every complaint seriously, handles them carefully, and documents them irrespective of background or appropriateness. For this purpose, pbb Group has established a dedicated process in order to ensure that complaints are dealt with efficiently – this process has been laid out in an internal guideline, which is binding for all employees. Via pbb Group's different homepages customers and other interested parties can get access to information about how complaints are being dealt with (inter alia information with regards to existing possibilities for complaints submission, the procedure of complaint management, alternative dispute settlement procedures – <https://www.pfandbriefbank.com/en/complaints.html>). The centralised office responsible for complaints within pbb Group collects all complaints, reviews them on a regular basis, and provides reports to the Management Board and the Supervisory Board, amongst others. If necessary, the Management Board would resolve appropriate improvement measures. As it had been during the previous years, the number of complaints during 2018 was in the low double-digit range.

## Sustainable financing solutions

As a specialist bank, pbb Group finances commercial real estate projects as well as infrastructure projects of the public sector. pbb Group sets high standards when granting loans – also in terms of sustainability. As a general rule, pbb Group's actions are always within the boundaries set by legal, and – in particular – the applicable supervisory requirements. Furthermore, pbb Group has laid out additional ethical and moral standards in its Code of Conduct, which emphasises sustainable behaviour. pbb Group does not support business practices that could harm our reputation or give rise to the suspicion that the client is acting unlawfully, or is violating our ethical and moral standards. Illegal activities or activities that could otherwise damage the Group's reputation include:

- > Money laundering
- > Financing terrorism
- > Drug trafficking
- > Illegal weapons trade
- > Violation of human rights
- > Human trafficking
- > Smuggling of goods
- > Bribery of government officials or other officials
- > Granting and/or accepting undue benefits
- > Tax offences
- > Illegal or unauthorised use of property, including land ownership
- > Market abuse, such as market manipulation or insider trading
- > All forms of organised crime
- > Environmental pollution, including excessive emissions, illegal waste disposal as well as any type of falsification of documents associated therewith
- > Illegal use of labour, including forced labour and child labour

The above list is not exhaustive, yet representative of pbb Group's commitment to distance itself from any illegal practices or any other activities that may damage its reputation. Our ethical principles and guidelines are above income respectively return from individual transactions.

Besides economic aspects, ecological considerations, also the sustainability of income streams and the building structure itself all play important roles for the financing of commercial building projects and the overall real estate portfolio. If pbb were to ignore its sustainability principles, the Group would considerably increase potential risk regarding interest and principal payments, and the repayment of granted loans. In addition, this would represent significant financial risk for clients and real estate investors, given that their equity investments would be drawn upon before the loans granted by pbb in any form of insolvency proceedings. Therefore, the interests of pbb Group are in line with general sustainability interests. pbb Group adopts the principle of economic sustainability in the credit approval – which involves the Management Board – via a clearly defined and carefully designed due diligence process.

The assessment of income sustainability is generally based on the valuation of relevant aspects, such as economic, demographic and sociographic factors as well as real estate (e.g. property location, sales ratios, occupancy and vacancy rates, tenant structure, rental income, general administrative and maintenance costs) and financing (e.g. financing volume and structure, loan-to-value ratios, financing conditions) considerations. The assessment of the building structures' sustainability is generally based on the structural quality, taking ecological aspects into account, such as the composition and quality of the used materials and the quality of the construction work. Furthermore, eco certifications are taken into account, such as Green Building Programme certificates, or energy labels. If pbb were to ignore contaminated sites, or if it tolerated ecologically irresponsible construction work, the intrinsic value of the respective property (or the corresponding mortgage securities) would be jeopardised.

In order to ensure financing sustainability, close cooperation between Sales, Risk Management, as well as Property Analysis & Valuation, is required at an early stage of the credit process within pbb Group – which has been laid out in the corresponding process structure and internal guidelines. pbb Group maintains a dedicated department comprising 42 real estate surveyors, and cooperates with external real estate experts. In the case of suspected contaminated sites, pbb carries out additional research and usually obtains specialised expert opinions. In order to ensure the sustainability of properties yet to be financed, our surveyors provide an assessment of the real estate regarding its economic and structural risks. The assessment result – including any conspicuous or unusual features – are summarised in a property report, which is used, among other factors, to take the credit decision. Furthermore, in the corresponding valuation opinion, the sustainability of the property value as a financing object is explicitly considered through the lending value concept. More specifically, sustainability aspects such as the energy efficiency of a building, or any contaminations, are considered very carefully in the valuation of properties. In addition, the basis and time intervals for credit decision reviews have been clearly laid down. The same applies to the inspection of properties – our guidelines provide unambiguous instructions as to when (and by whom) these inspections shall be conducted. pbb applies particularly rigorous monitoring and monitoring processes for new buildings as part of so-called development financings, and for construction measures within existing properties (e.g. modernisation or reconstruction activities) as part of so-called investment financings. Our monitoring processes also comprise working conditions as well as human rights. Given the close cooperation of all pbb divisions, in particular the involvement of Property Analysis & Valuation at an early stage, pbb Group efficiently selects its new business exposure, which is essential for the long-term success of the Group and its clients. Furthermore, this approach allows us to avoid negative repercussions for the environment and the society as a whole.

In Public Investment Finance, pbb Group contributes to society by financing investments for the provision and improvement of public infrastructure. Many of the public investment financing projects have a direct and sustainably positive social as well as environmental impact. For instance, pbb Group finances investments in social and health care facilities, public administration buildings, or renewable energy. Whilst the relevant credit process is largely in line with Commercial Real Estate Finance, pbb Group's lending business in Public Investment Finance is not only based on tangible assets and income generated from such assets, but additionally on the credit quality of public-sector entities such as cities or regions. One basic principle is the transactions' sustainability: a detailed due diligence process is employed to ensure the long-term intrinsic value – and hence, interest and debt servicing ability as well as the ability to repay the loan. Social and environmental aspects are incorporated into the assessment. Sustainability is a key concept, especially as far as export finance facilities under public guarantees (export credit agency or "ECA" financings) are concerned: depending on the valuation as per OECD guidelines and the size of the asset in question, external consultants may additionally be involved for the evaluation of sustainability issues, such as environmental aspects but also working conditions and human rights. Given the major importance of sustainability aspects in the ECA business, pbb Group's Management Board – in addition to the general guidelines set out in the Code of Conduct – adopted an internal business-specific guideline in 2017, that governs the determination and assessment of risks relating to human rights, corruption as well as environmental protection, in relation to ECA-covered export, project or infrastructure financings. Once funding has been granted, the risk assessment will be updated as part of the annual review, usually based on the environmental reports that have to be prepared for the respective transactions.

pbb Group has committed itself to making an active contribution to further develop and promote sustainability standards. For this reason, the Group is active in numerous working groups: in the real estate (financing) business, pbb Group takes part in working groups of the Association of German Banks (BdB) and the Association of German Pfandbrief Banks (vdp), as well as in the initiative launched by the European Mortgage Federation (EMF) and the European Covered Bond Council (ECBC) to determine energy efficiency of buildings in Europe. Through its participation in working groups as well as in various association bodies, the Group succeeded in further advancing sustainability standards: for example, the inclusion of environmental certificates into pbb Group's database. Thanks to the active involvement of pbb Group, the vdp valuation committee determined energy-efficiency criteria (as part of a property and market rating) which will be included as additional criteria into vdp's transaction database. In the public finance sphere, pbb Group is active in the BdB export and commodity finance working group, vdp's export finance working group, in the ICC Export Finance Working Group, as well as in the Euler Hermes expert committee.

### Risik management

Besides client focus, risk management constitutes another core success factor for pbb to secure its sustainable business performance. Within the framework of risk management, pbb Group identifies, analyses and monitors all potential risks. Given its key importance for pbb Group, the risk management function is anchored as an integral component of the Group, both in terms of organisation and processes. Please refer to the Risk and Opportunity Report in pbb Group's Combined Management Report 2018 for more detailed information on risks and opportunities identified for the various types of risk, within the scope of the risk management and risk control system implemented.

## CORPORATE GOVERNANCE

### Code of conduct and ethical principles

Transparent, fair, responsible and honest conduct – with the required degree of expertise, professionalism and integrity in dealings with one another, clients and business partners, competitors and the public – are deeply rooted in pbb Group, and require that the relevant legal, supervisory and internal obligations as well as other relevant laws and regulations are implemented and adhered to.

pbb Group's Code of Conduct sets out the ethical and legal framework as well as the indispensable standards the Group expects its employees to live by. The Code of Conduct provides more than just guidance – it is a binding part of each employee's work contract, forming the basis for all other framework regulations within pbb Group.

Amongst other things, the Code of Conduct offers very clear guidance on questions regarding relationships with clients, suppliers, shareholders, investors and competitors – as well as how to respond to conflicts of interest, bribery, the granting of advantages, preventing money laundering and market abuse. pbb Group strives for not supporting any visible business practices that could harm our reputation or give rise to any suspicion that clients or suppliers would thereby violate pbb Group's ethical standards or in breaking the law

The applicable law, as well as all the regulatory provisions in force in the various jurisdictions where pbb Group does business, form the basis for the entire corporate decision-making process and our day-to-day operations. They are complemented by internal regulations and detailed process descriptions. As a listed company, pbb adheres to the German Corporate Governance Code under application of the "comply or explain" principle. This Code describes the legal requirements posed for managing and supervising German listed companies. It furthermore reflects current national and international developments, alongside standards of good and responsible corporate management.

### Compliance

The Compliance function's significance within pbb Group has been growing continuously. To account for its relevance, the Compliance function was separated from the Corporate Office and was set up as an independent business area in 2018.

Compliance targets adherence to statutory and other legal requirements with the means of an effective Compliance Management System. This holds especially true for legal requirements concerning the performance of investment services. Compliance with these requirements serves client/investor protection, and thus the protection of pbb's reputation. The core of the norms that must be adhered to consists of the EU Market Abuse Regulation, the German Securities Trading Act, and the regulations and guidelines based thereon. Compliance risks include sanctions, financial losses and reputational risks that may arise from violations of these rules. The Group takes any fraudulent act very seriously, both for commercial reasons and because of its legal obligation to prevent such acts.

pbb and its Group entities have devoted themselves to very high standards of honesty, openness and responsibility, applied both within the organisation and for all business activities. We need to be able to rely on each other, and our clients must be able to trust us. Our employees play a central role in this context. Therefore, pbb Group has implemented tools for whistleblowing for internal and external hints on statutory violations and undesirable conduct, which are regularly reported to the Management Board and Supervisory Board by Compliance.

Beyond the Code of Conduct mentioned above, pbb employees are required to adhere to numerous internal guidelines and instructions, for example on combating other criminal acts, on information security, on preventing money laundering and the financing of terrorism, as well as on competition law.

In pursuit of the goals of education and raising awareness amongst staff, all of pbb's employees are obliged to take part in compliance trainings on a regular basis. These trainings cover a variety of topics, including the prevention of money laundering and other criminal acts such as corruption (including granting or accepting an advantage, engaging in active or passive bribery), breach of confidentiality and tax offences, competition law as well as general compliance issues. Successful participation in these trainings is only certified following a test. pbb wants its compliance trainings to align with its current business model and to cater to the needs of the respective target audience. It therefore offers overarching as well as individual trainings and information for the relevant divisions. Group Internal Audit regularly reviews how these trainings are conducted.

Banks are bound by a multitude of legal and regulatory provisions that have been installed to provide clients and business partners with a high degree of security. pbb Group, in turn, has installed various processes to ensure compliance with these provisions, such as a centralised monitoring process for key controls and risks. This so-called Control Attestation Process has all business divisions report to Compliance on a quarterly basis. For this process, pbb identified the key risks from a risk map and assigned them so-called Key Controls, which are subject to a continuous monitoring and confirmation process. The state of the Internal Control System is regularly reported to the Management Board and the Supervisory Board, based on the Key Controls in all business divisions.

In 2018, a new workflow system was introduced to identify which norms and regulations apply to pbb and to ensure adherence. The new system offers the comprehensive and edited submission of norms – quality-assured by a third party– and is designed to help ensure allocation, risk assessment and monitoring in a single system, with the option of linking the system to other systems of the Bank. All business divisions have access to this system and are obliged to identify the norms that are relevant to them, and assess them from a risk perspective. For material norms, a comprehensive control mechanism applies, with the business areas reporting to Compliance on how and to which extent the material norms are being dealt with.

Compliance advises the business areas and monitors the process with the support of an expert committee (LRRRC) and reports its findings directly to the Management Board and the Supervisory Board.

Pursuant to article 18 of the Market Abuse Regulation, issuers or any person acting by order of or for the account of such issuer must maintain lists of persons who are active on their behalf, and who are authorised to access inside information. pbb Group informs these persons about the legal duties resulting from the access to inside information, and on the legal consequences of violations of rules.

The harmonised purchasing policy stipulates that all relevant purchasing needs must be fulfilled through the IT-based purchasing and contract management system, which also serves as the contract database (incl. deadline management). Our purchasing policy also defines the multi-layer approval process, which includes the sourcing department and is based on a pre-defined assignment of approval powers. Suppliers are regularly assessed, allowing us to rank and compare them, to monitor their performance, and point out their weak spots.

In addition, the relevant Compliance processes are continuously reviewed in pursuit of further digitalisation, expansion of the monitoring system, and reconciliation with pbb Group's risk information. The Management Board and the Supervisory Board's Audit Committee receive detailed reports on all Compliance-relevant topics on a quarterly basis.

### Preventing money laundering and terrorism financing

pbb Group has committed to very high standards in the prevention of money laundering and the financing of terrorism, to make sure that ongoing reforms are always adequately accounted for. The Group has installed comprehensive policies, rules and regulations, and requires all employees to adhere to its stipulations. Examples of the Group's commitment include thorough Know Your Customer (KYC) processes, a continuous review of international lists regarding, inter alia, sanctions, suspicion of money laundering or terrorist financing, as well as risk analysis and ongoing reporting. The actions of pbb Group in this regard are essentially based on the German Money Laundering Act, adherence to which is monitored and reviewed through internal controls within the sales divisions, Compliance and Internal Audit according to the Three Lines of Defence. The task of preventing money laundering and financing of terrorism is being updated on an ongoing basis, and is annually reviewed by Internal Audit and the external audit of the annual financial statement.

### Anti-corruption and bribery

As a shield against corruption, pbb Group has established clear principles and guidelines for proper and professional conduct – for example with regards to conflicts of interest, fighting corruption, active and passive bribery. Special attention is given to accepting and granting benefits and gifts.

In their interactions with government representatives and public bodies, staff must refrain from any actions that could unlawfully influence the decisions of officials. In particular, cash payments, gifts and other benefits or perquisites to officials that could in any way be interpreted as undue influence, bribery or corruption, are prohibited.

### Data protection

Handling confidential data with great care and protecting our clients is a top priority. We adhere, inter alia, to the EU General Data Protection Regulation, German Data Protection Act, to national legal and regulatory provisions, to contractually agreed confidentiality clauses (including the so-called "banking secrecy") as well as to internal regulations on data protection. To ensure that these data protection requirements are met, pbb has implemented controls and sanctions. An in-house data protection officer, as a body of the management, also exercises control tasks. Furthermore, the issue of data protection is covered in every employment contract.

Our staffs receive ongoing training regarding data protection issues. Any breach of the data protection rules and regulations may have disciplinary consequences.

### Competition and antitrust legislation

In its Code of Conduct and internal instructions, pbb Group has set high standards of compliance with competition and antitrust stipulations as well as rules for discussions with competitors.

The business units that are of relevance in terms of competition law have been identified and receive regular, in-depth training on the subject. The heads of these units are required to regularly report on the Bank's alignment with competition and antitrust legislation to Compliance, as integrated into the pbb Group control concept.



## Respect for human rights

Respecting human rights is a matter of great importance to pbb Group. Above and beyond legal requirements, for example such as set by the German General Act on Equal Treatment and the German Act to Promote Transparency of Pay Structures (AGG), pbb Group has installed further non-negotiable stipulations in its Code of Conduct. The Code of Conduct includes aspects out of the European Convention on Human Rights. pbb Group has thus committed itself to respecting and complying with human rights and expressly distances itself from any cases of human rights breaches, be it that human rights were offended through a member of staff or another stakeholder group. Transparency, honesty and fairness, but also dignity and respect are among the most central guiding principles.

Honouring human rights is paramount along the entire value chain of pbb Group. It is therefore not only the responsibility of a centralised single function or office, but is anchored in the processes of all relevant divisions, for example Human Resources, Loan Markets and ECA Finance or Property Analysis & Valuation.

pbb Group respects all people, independent of age, sex, race, social background, skills, sexual orientation or religion, and is committed to fostering diversity amongst its staff as far as possible. No form of unfair treatment or discrimination will be tolerated. pbb Group sets great store by the diversity of its workforce, which is why the Group is devoted to preventing or removing discrimination against all employees. The main basis for prevention lies in all employees' commitment to the Code of Conduct, the document that makes it clear to all members of staff which requirements pbb Group deems non-negotiable.

pbb has an internal office that employees may turn to when they feel that discrimination pursuant to the German General Act on Equal Treatment has occurred. Should complaints be addressed thereto, these will be reported to the Head of Human Resources, and followed up by an internal clearance and review as to whether the General Act on Equal Treatment has indeed been violated. Depending on the severity, the implications and the legal, respectively economic risks associated with the violation, other entities such as Data Protection, Compliance, Legal, the Management Board or the Works Council may be involved where necessary. Based on the result of the review, further action or measures will be discussed or decided upon. The Complaints Office informs the complainant about the handling of his or her complaint, and will include a reasoning if the complaint is rejected. The complaint is documented and the documentation is kept separately from the personnel file.

Employees who discriminate against others may reckon that there will be labour law-related measures and disciplinary sanctions for their behaviour, ranging from a written warning to a possible redeployment or even dismissal. On the intranet, pbb informs its workforce concerning protective measures against discrimination with a dedicated pamphlet.

pbb Group employees are also duty-bound when it comes to human rights violations by other stakeholders. Should a staff member become aware of any indications that a prospective client or other business partner (for example supplier) may be involved in illegal activities or activities that could damage our reputation, they must inform the member of the Management Board who is responsible for the relevant area, as well as the Compliance Officer in accordance with our Code of Conduct. The relevant Management Board member, by involving the Compliance function, will then arrange for an investigation of the specific circumstances. In addition, other organisational units within the Group may also be involved in any further investigations (for example Internal Audit, Legal, Credit). The issue is also covered on a preventive basis in the Know Your Customer processes on clients and business partners, as well as within country analyses performed in order to identify target markets. A similar procedure applies to suppliers. Also in 2018, pbb Group prepared a statement of compliance with the UK Modern Slavery Act, in which suppliers and service providers were identified and the processes that have been set up to ensure conformity with this Act, whose applicability is limited to the United Kingdom, were laid out.

The issue of human rights is also anchored in the credit process. Saliency must be noted in the credit application, as part of the assessment or the ongoing credit management or be reported.

With ECA financings, depending on the valuation as per OECD guidelines and the size of the asset in question, external consultants may be retained to evaluate sustainability issues. The external assessments focus on the social and environmental impact of the asset yet to be financed. Their opinions are translated into specific, binding action plans. Their implementation is being tracked and reported on an annual basis. Should irregularities occur, corresponding measures will be taken and as a last resort, payments may be stopped.

The Management Board and the Audit Committee are informed about Compliance-relevant topics on a quarterly basis. This also applies to human rights abuses that have been reported or have occurred. In the case of serious breaches, the Management Board and the Audit Committee will be informed at short notice.

Further information on human rights can – to some extent – be found in the chapters on the individual sustainability issues.

During the financial year 2018, no human rights abuses became known at pbb Group.

## **EMPLOYEE MATTERS**

### **pbb Group as an employer**

An increased need for specialisation and demographic change, all within an environment marked by regulatory requirements, brings challenges to pbb Group in its HR work. pbb Group's HR work is based on a far-sighted HR strategy, which translates the Group's business and risk strategy (as well as its business model) into the HR world.

pbb's business model requires highly qualified employees with expert knowledge. The key objective of pbb Group's HR strategy therefore is to attract, retain and develop – for the long run – highly qualified employees with vast knowledge, a high degree of quality awareness, customer focus, leading competence at both divisional and project level, the willingness to be deployed flexibly, and a high degree of entrepreneurial thinking.

Implementation of the HR strategy is based on differentiated, strategic personnel planning, where medium- and long-term changes in the workforce and staffing needs are meticulously and systematically assessed and managed from a far-sighted point of view, as part of pbb Group's multi-year planning. We take great care in structuring our organisation and workflows efficiently, and with a focus on our clients. Our lean processes are continuously optimised, also for the purpose of cost-effectiveness.

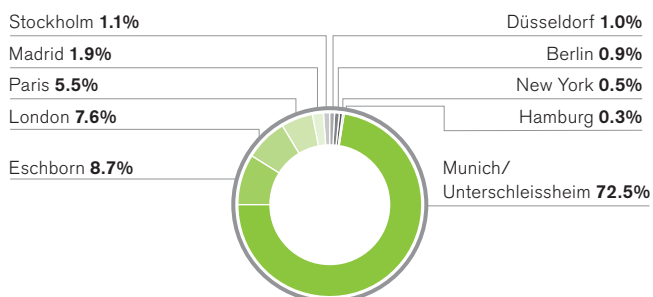
One result of our HR strategy is the restructuring strategy, another is the successful, diversified internal and external qualification programme, and yet another is the variable remuneration, which features incentives for individual performance, and promotes cooperation between business divisions, departments and teams. This shows that our HR strategy directly helps to ensure that pbb Group will remain competitive in the future, since it naturally competes with other banks, and continuously vies for the best talent in the market.

pbb Group creates a dynamic working environment, offers ways to earn qualifications, and presents career perspectives. The goal is to empower employees to find individual solutions with their clients, to think and act like an entrepreneur, with their focus on the client.

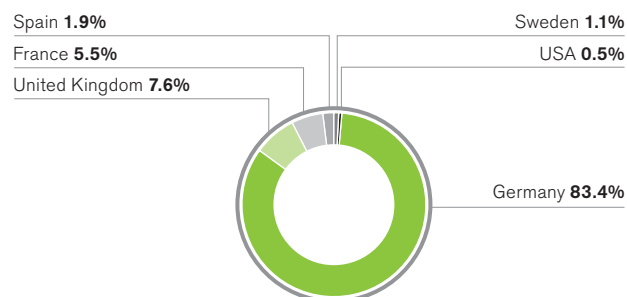
To attract and retain talented employees and managers, pbb will further increase its attractiveness as an employer, and position itself as a modern and flexible company to work for in 2019. The Bank's efforts in this field include a stronger recruitment strategy; furthermore they also comprise a particular focus on making it easier for employees to balance work and family life, but also on a systematic personnel development that meets the needs of the individual employee and the Bank.

### Regional distribution of employees (pbb Group) As of 31 December 2018

#### Location



#### Country



As in the previous year, pbb Group's workforce remained stable during 2018, by and large. pbb Group employed a total of 793 people at the end of 2018<sup>1</sup> (2017: 782 people). In 2018, the adjusted<sup>2</sup> fluctuation for pbb Group was 8.41% (2017: 9.11%). The ratio of voluntary redundancies was 5.35% (2017: 4.23%).

<sup>1</sup> Headcount pursuant to the HGB (excluding Members of the Management Board, interns and student employees). pbb AG employs 784 people, CAPVERIANT GmbH 9 people. Figures provided below relating to employees refer to the Group.

<sup>2</sup> Adjusted fluctuation comprises any fluctuation initiated by the employer or employee, as well as discharges due to fixed-term employment contracts running out. Adjusted fluctuation was calculated based on an average headcount of employees of 785 (pursuant to the HGB).

### Remuneration and employee benefits

The remuneration system and the remuneration strategy of pbb Group are integral components of the business and risk strategy of pbb Group. With its remuneration strategy, pbb Group aims to guarantee a fair, performance-oriented remuneration in line with the market – one that is geared to achieving the targets enshrined in the business and risk strategy. The Bank also strives to grant industry-standard employee benefits, while also taking local idiosyncrasies into account that may apply to a specific location.

The remuneration strategy is an integral part of the HR strategy. In particular, the variable remuneration system includes appropriate incentives for individual performance, but also promotes and improves cooperation between business divisions, departments and teams. With the variable remuneration components, employees have the chance to participate directly in the success of pbb Group.

Another key element in the remuneration strategy of pbb Group and its remuneration system is the fulfilment of regulatory requirements that deal with the remuneration systems of banks. On the one hand, this means that the implementation of the statutory principle of appropriateness of individual remuneration components regarding total amounts and structures is accounted for, with the ultimate objective being the avoidance of disproportionately high risks. Total remuneration amounts, and individual remuneration components of Management Board members and employees, are subject to regular revision in order to establish an appropriate relation regarding function and performance as well as pbb Group's overall performance. Moreover, the appropriateness of the Group's remuneration system is regularly reviewed by an independent external remuneration consultant, who uses external benchmarks to produce market comparisons of remuneration amounts and structures. Also in 2018 the system, structures and amounts of remunerations were reviewed for appropriateness, and confirmed as such by both the Management Board and the Supervisory Board.

On the other hand, the remuneration system of pbb Group implements all other regulatory requirements regarding remuneration, in particular those regarding the variable remuneration component. Of particular importance for pbb Group are the regulatory requirements regarding remuneration systems pursuant to the German Banking Act (KWG) and pursuant to the German Ordinance on Remuneration in Financial Institutions (Institutsvergütungsverordnung – "InstVergV"); especially requirements on the variable remuneration of risk takers and senior managers), as well as – for the Management Board – those resulting from the German Stock Corporation Act (AktG) and the German Corporate Governance Code (DCGK). Moreover, provisions under framework or contractual arrangements – as well as the remuneration principles of the SoFFin (as amended in 2012) – are observed. Compatibility of the remuneration system with the central regulatory requirements is regularly reviewed and approved by an independent external remuneration consultant, external lawyers, and the auditor. pbb established dedicated processes to ensure that any future regulatory changes will be implemented in a timely manner. The above-mentioned InstVergV was amended on 4 August 2017, with BaFin publishing an interpretative guidance on 15 February 2018. In 2018, pbb Group evaluated what changes this required to its remuneration system and is currently taking appropriate steps.

The remuneration system of pbb Group is explained in detail in the Remuneration Report of pbb Group's Annual Report.

#### **Fair remuneration**

The remuneration of members of staff whose conditions of employment are governed by collective wage agreements, so-called tariff employees, in Germany is ruled by the collective agreement for private and public-sector banks.

pbb is a member of the employers' association for the private banking sector (AGV Banken). Tariff employees are assigned to a grade along the scale agreed in collective agreement, based on the work they do. With this approach, an industry-standard minimum remuneration independent from questions of race, ethnicity, sex, religion or personal beliefs, handicaps, age or sexual orientation is warranted, and we ensure that a person's remuneration reflects their qualifications, duties, function as well as their professional experience.

To provide for adequacy and fairness in the remuneration of non-tariff employees, remuneration is regularly reviewed as to whether it is in line with prevailing market terms, using external benchmarks and a functional classification system. The benchmarking is based on a standard classification scheme for job or function levelling (the Towers Watson Career Map), with three so-called career paths ("M" = Management; "P" = Professional, and "T/U" = Services/Administration), and to different career levels within these career paths. This classification lays the groundwork for the verification of remuneration in terms of market levels (the so-called "market matching"). Another comprehensive benchmarking exercise was carried out in 2018, with market appropriateness of remuneration being reviewed and remuneration ranges adjusted where necessary.

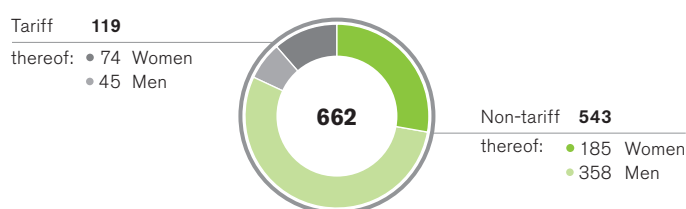
Further dynamic to the salaries of non-tariff members of staff is determined by the individual employee's qualifications, duties, function, performance as well as professional experience, disregarding questions of race, ethnicity, sex, religion or personal beliefs, handicaps, age and sexual orientation. With this approach, it is warranted that non-tariff employees also receive an adequate and fair remuneration.

Variable remuneration, which applies throughout pbb and all other Group entities in as uniform and viable a manner as possible, is determined using a formalised and transparent process, harmonised across the Group. Allocation of variable remuneration is based on the achievement of qualitative and quantitative targets at both divisional and individual level – to the extent possible, reference shall be made to pbb Group's business and risk strategy; target achievement shall be determined for every division and every employee at pbb Group. The qualitative and quantitative divisional targets are established on an annual basis and derived from the corporate targets and the business plans made for the respective financial year. A reference value representing 100% target achievement is defined, in advance, for each target, to facilitate measuring the level of target achievement and hence, determining variable remuneration. The Management Board of pbb adopts the divisional targets, which are communicated to all employees of the respective divisions at the beginning of the year. At the individual level, every employee is provided with an annual target agreement comprising quantitative and qualitative targets for the current financial year. The measurement of every target is based on indicators, allowing transparent performance assessments at the end of every financial year. pbb Group conducts annual employee reviews within the scope of an annual process; holding these discussions is part of managers' responsibility. The structured employee review takes place between each employee and his or her manager, for the purpose of assessing the employee's performance during the year under review, and for agreeing upon targets for the following financial year. Accordingly, the employee review is a key instrument for establishing a common understanding of performance standards, as well as on concrete targets and expected results. During the review, the priorities for the respective financial year – aligned with, or derived from, the Bank's business and risk strategy – will be discussed. Employee review and performance appraisal are key management tools which ascertain that staff activities and priorities are aligned with target achievement and the Company's performance, and ensure fair remuneration. Human Resources supports and monitors the regular conduct of employee reviews. A guideline for managers and employees containing important information on target agreements and employee review discussions is available on pbb's intranet.

Company pensions are an important pillar of the additional benefits pbb Group has to offer. For its employees in Germany, pbb Group has established defined-contribution and defined-benefit plans. In the defined-contribution plans, pbb makes payments for commitments by industry-wide organisations such as the German pension provider for the financial industry BVV; BVV has been an important company pension option for employees having joined the Bank since 1 April 2004. In all of the Group's non-German entities to which no legal or tariff provisions apply, a company pension scheme – in a locally common form – is in place.

### Proportion of tariff employees/non-tariff employees (pbb group) 31. Dezember 2018

#### Germany only



### Employee benefits

pbb Group provides members of its staff with a comprehensive employee benefits package, including – depending on the employee's location – capital-building payment schemes, sickness benefit and grants to the statutory sick pay, anniversary pay, lunch allowance, special leave in case of special events and a group accident insurance policy. Depending upon the position an employee holds within the Bank, and of the necessity of a car for company travel, pbb Group grants company cars that may be used for private journeys at all German locations. In Unterschleissheim and Eschborn, voluntary preventive healthcare measures such as free flu shots, health checks and computer glasses are available. In September 2018, we held "Prevention Days" on the topic of mobility and exercise in our Eschborn offices, during which employees were informed and advised on a healthy back (on a voluntary basis), and could opt to have their body stability and mobility checked. Since 2015, pbb Group has considerably expanded its health promotion initiatives. pbb also has a workplace integration management system in place, which all employees affected may make use of.

During 2018, pbb Group employees in Germany were once again able to lease high-quality communication devices of the newest generation such as PCs, notebooks, tablets or smartphones, through pbb Group at attractive terms and for their private use. The monthly lease instalments are directly offset against gross salary, allowing pbb employees to benefit from tax benefits for private use of communication technology available in Germany, in line with their own marginal tax rate.

### Working environment

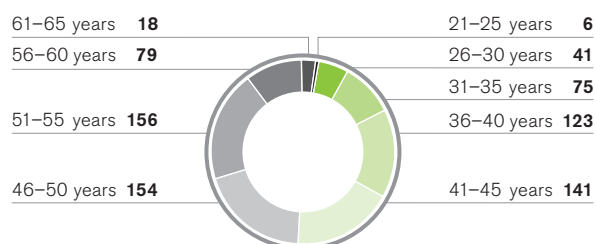
At all of its locations, pbb Group provides its workforce with a modern, secure and healthy environment to work in. pbb Group employs women and men from many different nationalities with different skills and different backgrounds. These form the basis for sustainable corporate success.

Promoting diversity and the personal growth of our employees, with fair working conditions, is at the heart of the Group's HR work. pbb Group respects human dignity, human rights and an employee's right to privacy. All staff members are treated with fairness, dignity and respect. pbb Group has zero tolerance with regard to unfair or discriminatory behaviour towards its staff. It is committed to the principles of equal treatment in the selection and further development of staff, without discriminating against any employee (or potential employee) due to race, ethnicity, sex, religion or personal beliefs, handicaps, age or sexual orientation. Employees are assessed on their performance alone. pbb Group honours the legal and contractual rights of its employees. These values are essential to the instruction related to compliance, which employees must adhere to as per workers council agreements and/or their employment contract, as well as to pbb's Code of Conduct. They form the foundation for our executives' and employees' work. The work and conduct of executives and employees alike – and therefore that of our Bank – is based on mutual respect, openness, honesty and a joint understanding of trusting collaboration. pbb Group focuses in particular on the issue of gender balance. This focus is supported by increased awareness for the topic across all levels and the establishment of a corresponding management and corporate culture, as well as the internal obligation to specifically address the under-represented gender for the given situation when filling vacant positions, while taking in account ability and qualifications. Further information on this topic can be found in our Corporate Governance Report, published as part of the 2018 Annual Report.

pbb has an internal office that employees may turn to when they feel that discrimination pursuant to the German General Act on Equal Treatment has occurred. On the intranet, pbb informs its workforce concerning protective measures against discrimination with a dedicated pamphlet.

### Age structure of employees (pbb Group) As of 31 December 2018

Number



### Nationalities of pbb Group's employees

31 December 2018

Australian	1	Italian	5
Austrian	9	Latvian	1
Belarusian	1	Macedonian	1
Belgian	2	Polish	5
British	47	Romanian	2
Bulgarian	2	Russian	3
Chinese	4	Serbian	1
Croatian	2	Slovenian	1
Czech	2	Spanish	17
Dutch	3	Swedish	10
French	46	Swiss	1
German	611	Turkish	2
Indian	4	US American	5
Irish	4	Vietnamese	1
<b>Total</b>			<b>793</b>

### Fair working conditions

Since 2010, pbb has been a signatory to the Diversity Charter, thus demonstrating its fundamental commitment to the economic benefits of diversity, tolerance and fairness among a company's employees as well as among its customers and business partners. The Diversity Charter binds its signatories to creating a working environment that is free of prejudice and exclusion, and to establishing an open corporate culture based upon mutual respect and the involvement of stakeholders. This vision is something we actively live. We take heed of an even-keeled structure of our workforce in the demographic sense, and employ people from a vast variety of education and sector backgrounds.

Every employee must be able to address workplace problems without fearing repercussions. The Group fosters an open corporate culture that provides for the inclusion of employees in the decision-making process, while at the same time maintaining discretion. It further ensures that procedures exist within the Group in order to resolve any workplace problems confidentially and as quickly as possible, including a Complaints Office for complaints under the German General Act on Equal Treatment, dedicated contacts at Human Resources and a whistleblowing system. 2018 was another year without any complaints about working conditions or inhumane activities.

Efficient and committed employees are central to the success of every company, which is why pbb Group invests in the health of its employees. The Health and Safety Committee (ASA) that was implemented in Germany, together with a company doctor and the occupational safety specialist, as well as representatives of the Works Council and the safety officers, met on a regular basis throughout 2018 to consult on the status of occupational safety and health protection at pbb Group's German offices, and to decide upon measures to improve occupational safety and the prevention of accidents. Company doctors hold consultation hours for employees at the Unterschleissheim and Eschborn locations. Furthermore, pbb Group voluntarily offers its employees various health measures, for which it assumes the costs. In 2018, we conducted 28 preventive checkups on working with display screen equipment, eight workplace health promotions (taking the form of a free health evaluation), two very extensive consultations on individual topics and 101 vaccination advice sessions/vaccinations. Our offer to visit a company doctor was taken up by a total of 139 employees.

All executives receive regular training on occupational safety issues from the occupational safety specialist, in compliance with the German Act on the Implementation of Measures of Occupational Safety and Health. In 2018, 43% of executives took part in such a training. The Bank also offers first aid courses and further training for first-aiders every year, which also deal with the handling of automated external defibrillators. Similarly, fire prevention training is given annually, with refresher courses held every two years.

pbb Group has also expanded its health-promotion measures since 2015 and supports customised, personal offers in the areas of exercise, nutrition and stress prevention. It supports joint sporting activities such as participation in company runs and a beach volleyball competition in aid of child organ transplantation, as well as preventative measures currently held by external physiotherapists at pbb Group's offices in Unterschleissheim and Eschborn. Yet pbb Group's sponsorship of health-promoting measures is not limited to its German offices. Also at its international locations, the Group supports membership in sports clubs or gyms, eyesight tests, training for first-aiders and fire prevention officers, health checkups and workplace evaluations.

### **Work-life balance**

Helping employees reconcile their responsibilities at home and at work by providing support for childminding has increased in importance – both in the goal of promoting women and in the Bank's endeavour to become a more attractive employer. By providing the corresponding work organisational conditions, such as flexible working models or the possibility of a home office, pbb Group offers attractive arrangements that make it easier to balance work and family. Parental leave is granted in line with statutory provisions; when employees return from parental leave, their working hours are organised with a high degree of flexibility. Furthermore, pbb is subject to the collective wage agreement for the German private banking sector and public-sector banks; in certain conditions, this provides for extended parental leave. In France, pbb offers kindergarten fee subsidies. In addition, in case of childcare problems pbb offers flexible home office opportunities, or permits bringing children to the office. Employees who care for a family member can rely not only on the legal provisions, but may also take unpaid leave or temporarily reduce their working hours.

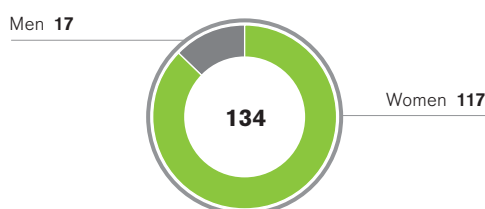


In the year 2019, pbb Group will continue to back employees in balancing working and family life by providing practical support for everyday situations. One example of pbb Group's commitment to its employees' work-life balance is an office planned at its new Garching location, which will be equipped with furniture and features appropriate for children and for "working with children". pbb also plans to offer a "work-life service" for all employees based in Germany, which will provide agency and selective advisory services. Further to this, pbb Group will start to subsidise childminding costs. Instead of participation in a daycare centre at the new Garching location, which offers support to individual employees, as was envisaged, the Bank will subsidise childminding costs for children not yet required to attend school.

16.90% of employees work part time (part-time share for female employees: 37.26%; for male employees: 3.55%); these numbers are evidence of the flexibility the Bank provides and how it supports compatibility of family and working life.

### Part-time distribution (pbb Group) As of 31 December 2018

Number



### Involvement and co-determination

In Germany, pbb has two local Works Councils (in Unterschleissheim and Eschborn) as well as a representation body for severely handicapped employees. In addition to these bodies, there is a Central Works Council, which has formed an economic committee. No Group works council exists. An employee representation body was active in our French offices in 2018, but no other such bodies exist at the remaining international offices. The working relationship between pbb Group and employee representation bodies is based on trust and regular exchanges, and pbb Group respects their rights.

Employees are kept in the loop through regular information provided by both their representatives and pbb Group via the intranet or e-mail, as well as in personal meetings. All members of staff have the opportunity and the right to organise in trade unions, as well as the right to assembly. In Germany, regular works meetings ensure that employees are comprehensively informed, and the time employees spend at these meetings is working time.

### Training and continuing professional development

The business model pbb Group pursues, and the ever more challenging and complex environment that it is active in, calls for highly qualified employees with expert knowledge. This makes training and continuing professional development (CPD) an important ingredient of the Group's HR strategy, and a core element in achieving the Bank's goals. In terms of personnel development, pbb Group follows a holistic approach that looks at each individual member of staff, provides them with guidance and, where necessary, support in their professional and personal qualifications and development. This requires that the qualification measures of the individual employee be identified and planned, to meet the needs the employee has in terms of knowledge and competence. Together with the principle

of "leading, challenging, encouraging" and the employee review, individual qualification is a cornerstone of pbb Group's personnel development. The annual employee review forms the basis for establishing qualification needs. If qualification measures are earmarked during the review, manager and employee mainly – but not exclusively – select and plan the contents of these measures in the context of the target agreement. The measure may be on-the-job, near-the-job, as well as off-the-job, and may be offered in-house or externally. Where qualification needs arise in the course of the year, further seminars or trainings above and beyond what was agreed during the review may be requested.

pbb Group offers a variety of in-house training and qualification measures, in particular in the realm of technical qualification, management and social skills to make line managers and project heads better leaders and to foster understanding for working in teams. In the course of the re-privatisation of pbb, pbb Group took a fresh look at training and CPD, set it up anew, and intensified it. The measures will be detailed in the following:

The continued systematic development of the organisational structure on the one hand, and a personnel development that is aligned with the individual requirements of divisions and employees on the other, will continue to challenge pbb Group, while also serving as a gold standard for successful HR work. Against this background, pbb Group strives to continuously evolve its qualification programme – and to continue to do so, going forward. With new initiatives adding to the broad range of existing measures, we will forge ahead to give important impulses in 2019 and beyond, to support our staff in their professional and personal growth in a modern and goal-driven way.

#### **Continuous professional development**

Training and personnel development of pbb Group employees, in respect of professional as well of their management and social competence, was continued and expanded, to ensure that the promotion and further development of its employees is actively supported in the future too.

Joint projects implemented on a cross-departmental level and across various locations within the scope of the Getting-Involved-Initiative introduced in 2016, and the Bank-wide mentoring programme for employees by second-level mentors, all support the promotion and long-term loyalty of employees. Dedicated trainee programmes integrate young talent into pbb Group, qualify them precisely for specific jobs, and support them. In addition to the permanent series of seminars offered, the Bank offers a constantly expanding range of in-house seminars on professional qualifications in the own field of work, as well as beyond this own area of expertise (i.e. dealing with topics relevant for pbb Group), and on qualifications in the areas of social and methodological competencies in a modern working environment as well as language training. Via the Leadership Academy, managers can acquire basic qualifications. Following these basic qualifications, there is the Leadership Excellence Initiative, designed in 2016 to support more experienced managers as they reflect upon and further improve their management and social competence in an increasingly challenging and complex working environment. 2018 saw the addition of yet another way to qualify our personnel further through an in-house programme: the Team Excellence Initiative. This initiative, which focuses on teamwork processes, was launched to support employees in collaborating successfully and to help them reflect their own team and communication behaviour. In 2019, two additional in-house measures for continuous professional development will be offered, aiming at improving and expanding the social and methodological skills associated with presenting and moderating which are required in numerous processes. Above and beyond these offerings, the Bank also enables executives with significant management responsibility to participate in individual coaching sessions.

In addition to the internal on-the-job and near-the-job measures – organised centrally as well as decentralised – pbb employees can resort to a wide range of external training measures. As a rule, the employee and his or her manager decide on the – in this case mostly professional – training measures within the scope of the employee review. The selected measures depend on the employee's needs. Thus, pbb Group paves the way for suitable employees to complete, inter alia, the international Real Estate Manager training (EBS), tailored to the needs of pbb Group.

Expenses for internal and external staff qualification measures totalled €0.88 million (2017: €0.8 million) during 2018. This was equivalent to 3.7 training days on average for each employee (based on an average headcount pursuant to the HGB of 785), or 6.2 days on average for the 465 staff members who took part in the qualification measures.

### **Knowledge management**

In order to make the transition into their job at pbb Group easier for new employees, the Bank has strengthened its onboarding efforts. Introduction plans and sponsorships – in which an employee with relevant experience is at the disposal of new employees for any questions they might have – are systematically included and requested by HR as a standard procedure with each new recruitment. pbb Group organises a “Welcome Day” multiple times a year for all new staff members, providing information on the organisation, the business model and pbb's primary process, as well as on interesting facts from the Human Resources department, in a casual atmosphere. The event aims to improve the integration of new employees and to help them familiarise themselves with the business and key (as well as cross-divisional) processes at pbb. In addition, 2018 saw the re-issue of a “welcome” brochure with “good-to-know” information on pbb's locations. New employees receive this brochure on their first day of work at pbb; it is also available on the intranet. Recruitment via social media and the university network was further expanded and permanently implemented. For example, pbb plans to participate in 12 recruitment fairs and continue its cooperation with universities in 2019, for instance within the scope of project studies at Ludwig-Maximilians-Universität München (LMU) and the Technical University of Munich (TUM).

pbb Group has a trainee programme called “Programme for Young Professionals” in place. Young professionals taking part in this 12- to 18-month programme are employed in various areas over the period – Finance, and Operations, for example – and especially in the Credit department, thus receiving comprehensive training.

Furthermore, pbb Group provides student employees with the opportunity for extra-curricular activities in many areas, and – should said students possess the relevant skills – also in combination with a bachelor's or master's thesis with practical orientation. In 2018, pbb joined the Fair Company Initiative, the largest employer initiative for fair internships, and obtained the Fair Company label.

### **Securing new talent and employer attractiveness**

pbb Group is facing increasing competition from other employers in attracting experts to the workforce. To meet the Bank's need for experts in the different departments, pbb Group has implemented various initiatives to attract young talent and strengthen their capabilities. In this context, pbb Group is increasingly paying attention to a better cooperation with key universities. In the event that pbb Group needs to cover short-term needs, it uses external resources as well as various recruitment strategies for hiring new employees. Active searches via networks, especially social media, are our main focus. We also carry out passive searches via job portals and social media. In addition, we engage agencies if required. Our attractive working conditions are one of our key success factors in attracting experts.

Furthermore, pbb Group has taken action with initiatives aimed at making the “pbb” brand more visible as an attractive employer to experts and young professionals (for example new online presence, social media/network presence, participation in selected recruiting fairs).

The fact that 99% of the positions in the Group are permanent, and a very high share of positions are filled internally, underlines pbb Group’s position as an attractive employer and boosts staff loyalty. The unchanged low to average adjusted fluctuation rate<sup>1</sup> of below 10% in 2017 and 2018 also demonstrates this.

<sup>1</sup> Adjusted fluctuation was calculated based on an average headcount of employees of 785 (pursuant to the HGB).

## ENVIRONMENT

The Group has committed itself to handling natural resources responsibly, to make an active contribution to climate protection by minimising its requirements for energy and raw materials, and to avoid environmental impacts. This is also defined in the Code of Conduct, in which pbb Group has obligated itself to conducting its business in a sustainable and environmentally friendly way, and to identifying environmental risks that may arise in its business activities. Material reference points for this are especially the buildings used by pbb Group, the organisation of workflows, and the mobility of the Group’s employees.

The member of the Management Board responsible for Information Technology is briefed about the development of different topics, such as energy and paper consumption, but also car pool and travel activity, on a quarterly basis.

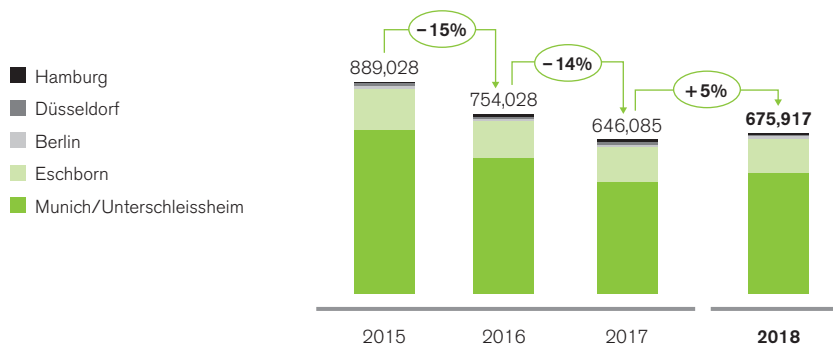
Our rented headquarters in Unterschleissheim near Munich have received the LEED certification for an energy-efficient and environmentally friendly building quality – and have been classified in the quality level Gold. They have a high level of energy efficiency, due to energy-efficient cooling ceilings instead of conventional air conditioning systems, for example. Furthermore, 100% of power demand has been met using renewable energy sources since 2011. As all other German locations have also been using power from renewable energy sources since 2015, respective power supply is carbon-neutral.

Due to additionally rented office space in Unterschleissheim in 2018, the power consumption increased slightly at that location.

Our ordinary Annual General Meeting 2018 was also carried out in a climate-neutral way, and we aim to extend this to the Annual Press Briefing and the Analyst Conference in 2019.

### Power consumption

in kWh

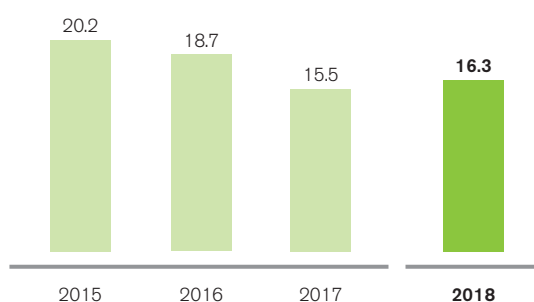


Electricity is permanently saved by using energy-efficient office equipment, such as printers with the Energy Star certificate, and by a strict management of electronic devices in line with demand.

Working processes are generally designed to be as paper-saving as possible. Hence, multiple electronic devices are used in order to replace paper-based processes; for example regarding electronic employee services (recording of working time, payrolls, income tax and social insurance receipts, travel expense accounting, etc.), an electronic invoice and contract management, digital credit files and datarooms. The paper we use is certified as eco-friendly. Our Annual Reports have been printed climate-neutral since 2015. Furthermore, pbb Group has refrained from the provision of printed interim reports since 2014, and is considering whether to stop printing Annual Reports from the Annual Report 2019 onwards. We further support recycling by re-using cardboard boxes received as transport packaging. 2018 saw a slightly higher volume of paper and cardboard purchased – the increase however is less a result of a generally higher consumption of paper, but rather a result of cut-off date effects due to a change in the order system.

### Purchase of paper and cardboard

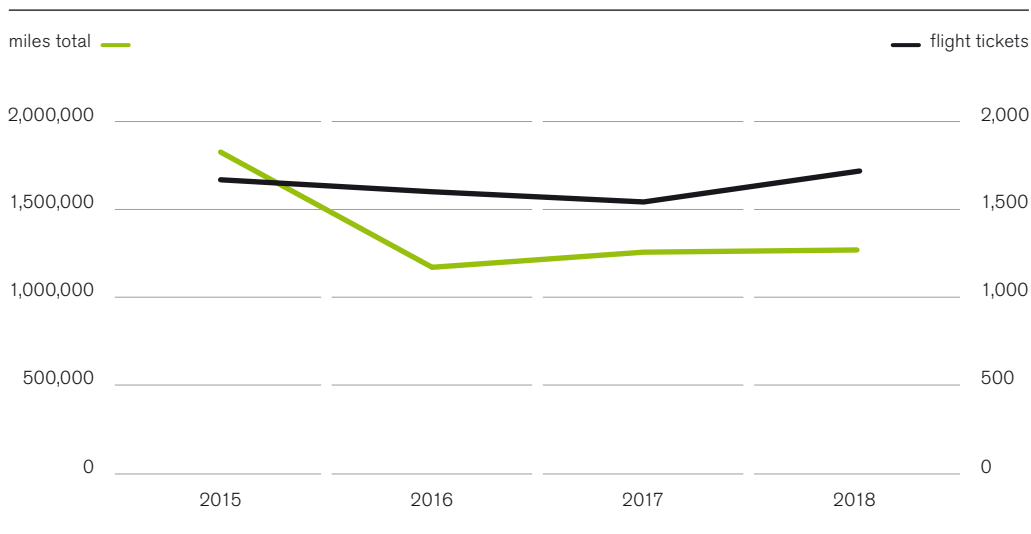
in t<sup>1)</sup>



<sup>1)</sup> German locations, without printed products.

The Travel Policy introduced in 2013 serves as a uniform groupwide standard for all employees' business travel. Besides simplifying effective management and control of travel expenses within pbb Group, it also aims to provide an active contribution to environmental protection. Employees and their direct superior are jointly responsible for adherence to the Travel Policy, which they will confirm through their electronic signature when recording and approving travel expenses in a designated online tool. Deviations from the Travel Policy are to be avoided. Exemptions from this rule can only be made for the sake of time and cost efficiency and with the superiors' explicit consent.

### Flight and travel volume



Initially, travel activity has decreased in the last years, both in terms of number of booked plane tickets, as well as regarding the amount of miles travelled. However, as a result of the opening of an own office in New York, US, the number of miles travelled saw a slight increase due to the long-distance flight – despite a decreasing number of tickets since 2017.

pbb Group further contributes to the reduction of business travel by the utilisation of video conference systems.

Company cars have to meet well-defined CO<sub>2</sub>-emission standards in accordance with the Company Car Policy so as to limit their impact on the environment. Vehicles with emissions of more than 155 g/km are given a financial penalty, whilst vehicles with emissions of more than 180 g/km may not be acquired at all. pbb Group has committed itself to checking these guideline values in the medium term and to align them to revised measurement methods. Compared with the previous year, the number of company cars and the average CO<sub>2</sub>-emission was slightly reduced (from 109 vehicles in 2017 to 105 in 2018; from 140g/km in 2017 to 138g/km in 2018).

Every company car order has to be pre-approved by the respective line manager and the HR department. The order process is coordinated by the Fleet Management Office/Corporate Services. The company car fleet currently includes two electric cars for which a charging station has been installed. Further such purchases are planned until the end of 2019. An e-mobility concept is currently being developed.

In 2019, pbb Group will relocate its headquarters from Unterschleissheim to Garching. Also the new office building is designed towards the responsible handling of limited resources: heat is obtained from geothermal energy, and electricity is generated from photovoltaic systems. Moreover, the location is very well connected to the local public transportation network – a high-frequency metro connection makes the use of public transport reliable and attractive for our employees. In addition, the new location will provide car-sharing offers. pbb Group is also considering the purchase of service bikes for the new location, and plans to provide its employees with charging stations for e-bikes.

# Financial Calendar

## Financial calendar 2019

13 May 2019	Results of the first quarter 2019
7 June 2019	Annual General Meeting
12 August 2019	Results of the second quarter 2019/Interim Report as of 30 June 2019
11 November 2019	Results of the third quarter 2019

# Future-oriented Statements

This report contains future-oriented statements in the form of intentions, assumptions, expectations or forecasts. These statements are based on the plans, estimates and predictions currently available to the management board of pbb. Future-oriented statements therefore only apply on the day on which they are made. We do not undertake any obligation to update such statements in light of new information or future events. By their nature, future-oriented statements contain risks and factors of uncertainty. A number of important factors can contribute to actual results deviating considerably from future-oriented statements. Such factors include the condition of the financial markets in Germany, Europe and the USA, the possible default of borrowers or counterparties of trading companies, the reliability of our principles, procedures and methods for risk management as well as other risks associated with our business activity.

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The German version of this Annual Report is the authoritative version and only the German version of the Combined Management Report and the Consolidated Financial Statements were audited by the auditors.

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