



BNG Bank
Annual Report **2019**

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Selected financial data	2019	2018	2017	2016	2015
(Amounts in millions of euros)					
Balance sheet total ¹	149,689	137,509	140,025	154,000	149,511
Loans and advances	89,163	85,738	86,008	87,576	89,366
- of which granted to or guaranteed by public authorities	80,341	77,733	77,727	79,304	80,159
Shareholders' equity	4,154	4,257	4,220	3,753	3,739
Hybrid capital	733	733	733	733	424
Equity per share (in euros)	75	76	76	67	67
Leverage ratio	3.6%	3.8%	3.5%	3.0%	2.6%
Common Equity Tier 1 ratio	32%	32%	30%	26%	23%
Tier 1 ratio	38%	38%	37%	32%	27%
Net profit	163	337	393	369	226
Net profit available to shareholders	142	318	318	365	226
Profit available to shareholders per share (in euros)	2.55	5.70	6.73	6.62	4.06
Proposed dividend	71	159	141	91	57
Dividend as a percentage of the consolidated net profit available to shareholders	50%	50%	38%	25%	25%
Dividend per share (in euros)	1.27	2.85	2.53	1.64	1.02
Social					
Number of staff (in FTEs) at year-end	309	302	303	292 ²	285
Sickness absence	3.5%	3.3%	3.0% ³	3.4%	2.9%
Funding raised by means of SRI bonds	1,934	1,190	1,383	1,560	650
Environment					
CO ₂ emissions (total, in tonnes) ⁴	377	453	515	540	511
Per FTE (in tonnes)	1.2	1.5	1.7	1.9	1.8

¹ Equity excluding hybrid capital.

² Starting in 2016, the FTE of positions for which a 40-hour working week has been agreed is determined on the basis of a 36-hour working week, resulting in over 1.1 FTE. The number of FTEs consequently increases by more than 7.

³ The methodology used to measure sickness absence was changed in 2017. The figures for 2017 onwards are not directly comparable with those of previous years. Please see the [Reporting principles](#) section for the details.

⁴ The conversion factors for the calculation of CO₂ emissions have changed. The emissions for 2016 have been recalculated on the same basis. The figures for 2016 to 2018 inclusive are not directly comparable with those of previous years. Please see the [Reporting principles](#) section for the details.

Foreword

The past year was a challenging year for BNG Bank. The credit requirement and the turnover achieved were at unprecedented levels. The rising credit requirement occurred across all sectors (local authorities, housing, healthcare, education, and energy and infrastructure). Clients use our financing to achieve their social objectives, such as more and affordable social housing, public facilities in municipalities, building and increasing the sustainability of healthcare and educational institutions and producing renewable energy. In this way, BNG Bank fulfils its mission to support the public sector with financing at attractive terms. After all, price certainly matters, particularly to the public sector. At the same time, BNG Bank is not immune to the low-interest environment; this puts pressure on the interest rate margin and on return on equity. Moreover, our operating expenses are increasing due to investments in digitalisation and costs resulting from supervision and regulations, including the gatekeeper function. We also had to recognise two significant individual provisions. All these factors combined led to lower net profit. BNG Bank is and remains a well-capitalised bank.

Focused on social impact in the Netherlands

BNG Bank's loans for all maturities, at attractive terms, are its main instrument for creating social impact. The volume of new long-term lending was EUR 14.0 billion. Relative to year-end 2018, the long-term loan portfolio increased by EUR 2.6 billion to EUR 84.2 billion.

Through this financing, we contribute to low costs for municipalities, housing associations, healthcare and education, and projects in the fields of energy and infrastructure. This is how BNG Bank contributes to the social impact that our clients create. Increasing sustainability and the energy transition are key themes for our clients. This is confirmed by the materiality analysis that we performed in 2019. In connection with the Climate Agreement, we had the CO₂ impact of our loan portfolio measured for the first time in 2019. The results serve as a starting point for establishing an action plan to reduce the CO₂ impact of our loan portfolio.

Raising funding throughout the world

A total of EUR 17.8 billion in long-term funding was raised with international investors to cover lending. This included six benchmark loans – in euros and US dollars – ranging in size from 500 million to 3.0 billion. BNG Bank has EUR 6.2 billion outstanding in sustainable bonds.

Financial results

The return on equity was 3.6%, lower than the target of 3.7%. Net profit amounted to EUR 163 million. The main reasons for the decrease in net profit compared with 2018 are a lower result on financial transactions and higher write-downs for credit losses. The result on financial transactions was EUR 37 million positive. The write-downs for credit losses amounted to EUR 153 million negative. This historically high amount is among others the result of the reduced creditworthiness a counterparty that provides services to municipalities. At EUR 435 million, the interest result remained virtually the same as in 2018.

The solvency ratios remained stable compared with year-end 2018; the Tier 1 ratio was 38% at year-end 2019. This is comfortably above the target of 24% set by BNG Bank.

In line with its dividend policy, BNG Bank proposes to payout EUR 71 million to shareholders. This equals 50% of the net profit after deduction of the dividend distribution to providers of hybrid capital. The dividend amounts to EUR 1.27 per share.

Outlook

There is more competition owing to the current interest rate environment and this is healthy. BNG Bank will continue to focus on the public sector and on achieving social impact. We focus on continually improving client and credit processes. We will therefore continue to invest in digitalisation, risk management and compliance with supervision and regulations.

Providing financing at low prices to our core clients remains our main instrument. Those low prices require an excellent risk profile (triple A ratings) to enable us to raise funding at competitive rates. To maintain the risk profile and hence the low prices in the years ahead, it is necessary for BNG Bank to continue to manage the volume of loans that involve the bank's risk capital (to a maximum of 10% of the loan portfolio). This requires us to make choices.

We also continue to invest in our employees. The employee satisfaction survey carried out in 2019 showed that employees take pride in the bank's social engagement and stability, as well as in the professionalism with which it operates. We will provide better support - in line with their feedback - for career development and mobility.

We do not consider it wise to make a statement on the expected net profit for 2020, as it is impossible to provide a reliable statement on the result on financial transactions. The corona virus has far-reaching social consequences, also for our customers. It is not yet possible to estimate what this means for the bank. Also the low interest rates will continue to put pressure on the development of the interest result.

On behalf of the Executive Board, I would like to thank our shareholders, clients, employees, Supervisory Board members and other stakeholders for their contribution to BNG Bank's performance in the past year. The value of BNG Bank's strategy was once again demonstrated in 2019. We take pride in this. Partly on that basis, we have confidence in the year ahead.

On behalf of the Executive Board,

Gita Salden
Chair
The Hague, 13 March 2020

Profile

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1.1 Mission and Strategy

Mission

BNG Bank is a committed partner for a more sustainable Netherlands. We enable the public sector to achieve social objectives.

Strategy

- We provide financing for all maturities while keeping prices to a minimum.
- By providing financial solutions, payment services and expertise, we enable our clients to achieve their social objectives.
- We build lasting relationships with our stakeholders and respond proactively to their requirements.
- Our services are always available, irrespective of the situation on the financial markets.

Core values

Our bank's core values are sustainable, reliable and professional.

- Sustainable is interpreted by us as simultaneously serving economic, environmental and social interests. This notion is inextricably linked to our mission
- In the light of our public role, reliable means that we are a safe bank due to the shareholding of Dutch public authorities and largely solvency-free lending, which is visible to and distinctive for our stakeholders.
- Professional means that we are continuously developing our services, our employees and our information provision.

Strategic objectives

We are a relevant player in the financing of Dutch local authorities as well as in the housing, healthcare, education, energy and infrastructure sectors. We aim to meet more than half of the long-term credit demand from those client groups and to do so in a viable manner. Our market share is an indicator of our level of success. We aim to achieve a reasonable return, rather than maximise profit. Through dividends, this return accrues to the public authority shareholders.

Conditions

The combination of the lowest possible lending rates and a reasonable return for shareholders is feasible because two conditions are met: an excellent risk profile and an efficient organisation.

BNG Bank is a committed partner for a
more sustainable Netherlands.
We enable the **public sector** to **achieve**
social objectives.

Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) will be important agenda items for the government and the business community until 2030. These SDGs are aimed at ensuring peace and prosperity for people and the planet, now and in the future, and were endorsed by all Member States of the United Nations in 2015. We contribute to the SDGs as well, and they guide our actions in both the short and the long term. As a bank, we focus on the SDGs that are closest to the services we provide.

Our contribution to the SDGs

Financing

- We provide financing to the public sector, healthcare institutions and educational institutions at competitive terms and conditions, thereby minimising the costs of social provisions (see the [Local authorities](#) section, the [Healthcare sector](#) section and the [Education](#) section).
- We finance various sustainable physical and digital infrastructure projects in support of economic development and welfare (see the [Energy and infrastructure](#) section).
- We provide our financing for all maturities while keeping prices to a minimum, irrespective of the situation on the financial markets. Low financing costs translate to lower costs for public facilities (see the [Mission and strategy](#) section).



Promoting sustainability

- We encourage our clients to take initiatives aimed at improving sustainability and help our clients achieve their objectives for a future-proof society (see the chapter on [Our contribution in 2019 and outlook](#)).
- Making a contribution to the energy transition has been made a key objective of our sustainability efforts. We facilitate the energy transition by financing wind and solar energy projects, geothermal energy and district heating networks and making the housing stock more sustainable, among other things (see also the [Energy and infrastructure](#) section).
- Telos, the institute for sustainable development of Tilburg University, has developed frameworks that provide insight into the sustainability performances of municipalities and housing associations. The framework for [municipalities](#) and the framework for [housing associations](#) are published on the website.
- The funds generated from issuing sustainability bonds are used to provide financing to the most sustainable municipalities and housing associations (see the [Funding](#) section).
- Through the Energy Transition Financing Facility (ETFF), the Ministry of Economic Affairs and Climate Policy stimulates investments in energy transition market segments that are still maturing. We provide the subordinated loans within this facility.
- In our own business operations, we aspire towards using materials and energy as efficiently as possible and towards reducing our CO₂ footprint (see the [Sustainable operations](#) section).
- As from 2019, we report on the CO₂ impact of our lending, and we will present an action plan for reducing this CO₂ impact by no later than 2022. We will measure the CO₂ impact of our loan portfolio on the basis of the methodology developed by the Partnership for Carbon Accounting Financials ([PCAF](#)).

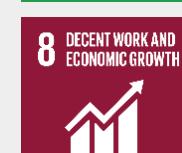


BNG Sustainability Fund

- The BNG Sustainability Fund facilitates sustainability initiatives in the fields of healthcare, education, housing and the environment. Associations, companies and other business initiators can take out loans under the BNG Sustainability Fund for projects to improve sustainability in these areas that contribute to the sustainability objectives of municipalities or provinces (see the [BNG Sustainability Fund](#) section and the [Fund's website](#)).

**Employees**

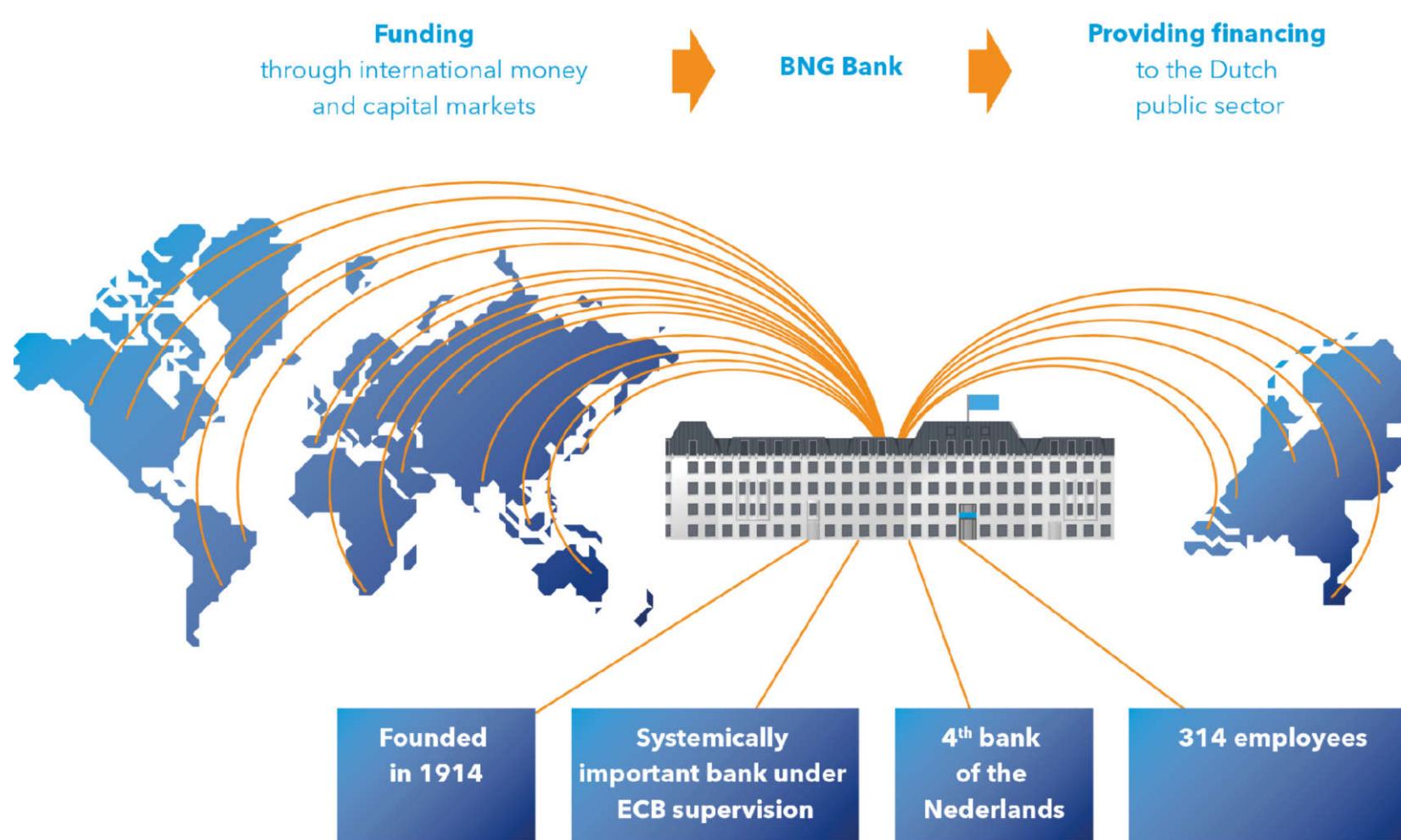
- A training and education budget (for courses and programmes focused on the current position) and a mobility budget (for courses and programmes focused on a future position within or outside the bank) is provided for our employees to enhance their sustainable employability (see the [Employees](#) section).
- We have a policy of promoting our employees' health and well-being, which enables them to participate in sports activities and yoga (see the [Employees](#) section).
- We provide decent and fulfilling work to all our internal and external employees. We offer a safe working environment, adequate development opportunities and protect the rights of our employees (see the [Employees](#) section).

**BNG Cultuurfonds**

- The BNG Cultuurfonds promotes art and culture activities that are important for municipalities and municipal policy (see the [website](#) for more information on the fund).



1.2 Business model



BNG Bank acts as an intermediary between the international money and capital markets and the Dutch public sector. We have provided financing to the public sector since 1914, at competitive terms and conditions and for all maturities, irrespective of the situation on the financial markets. Our clients are in the housing, healthcare, education, energy and infrastructure sectors and also include local authorities. The majority of the loans we provide (more than 90%) are loans that are guaranteed by government bodies. These loans are not subject to solvency requirements and have a risk weighting of 0%. We can also take care of payment transactions for our clients. We have one branch in The Hague from where all our activities take place.

We are one of the largest issuers of bonds in the Netherlands. BNG Bank is seen as a safe bank thanks to the shareholding of Dutch public authorities and largely solvency-free lending. We have the highest external credit ratings (Moody's: Aaa, FitchRatings: AAA, S&P Global: AAA). This provides us with a strong funding position on the international money and capital markets. We can raise short-term and long-term funding in various currencies at low prices. This in turn enables us to offer our clients low lending rates. None of the products and services that we provide are the subject of questions raised by stakeholders or of public debate.

Stakeholders

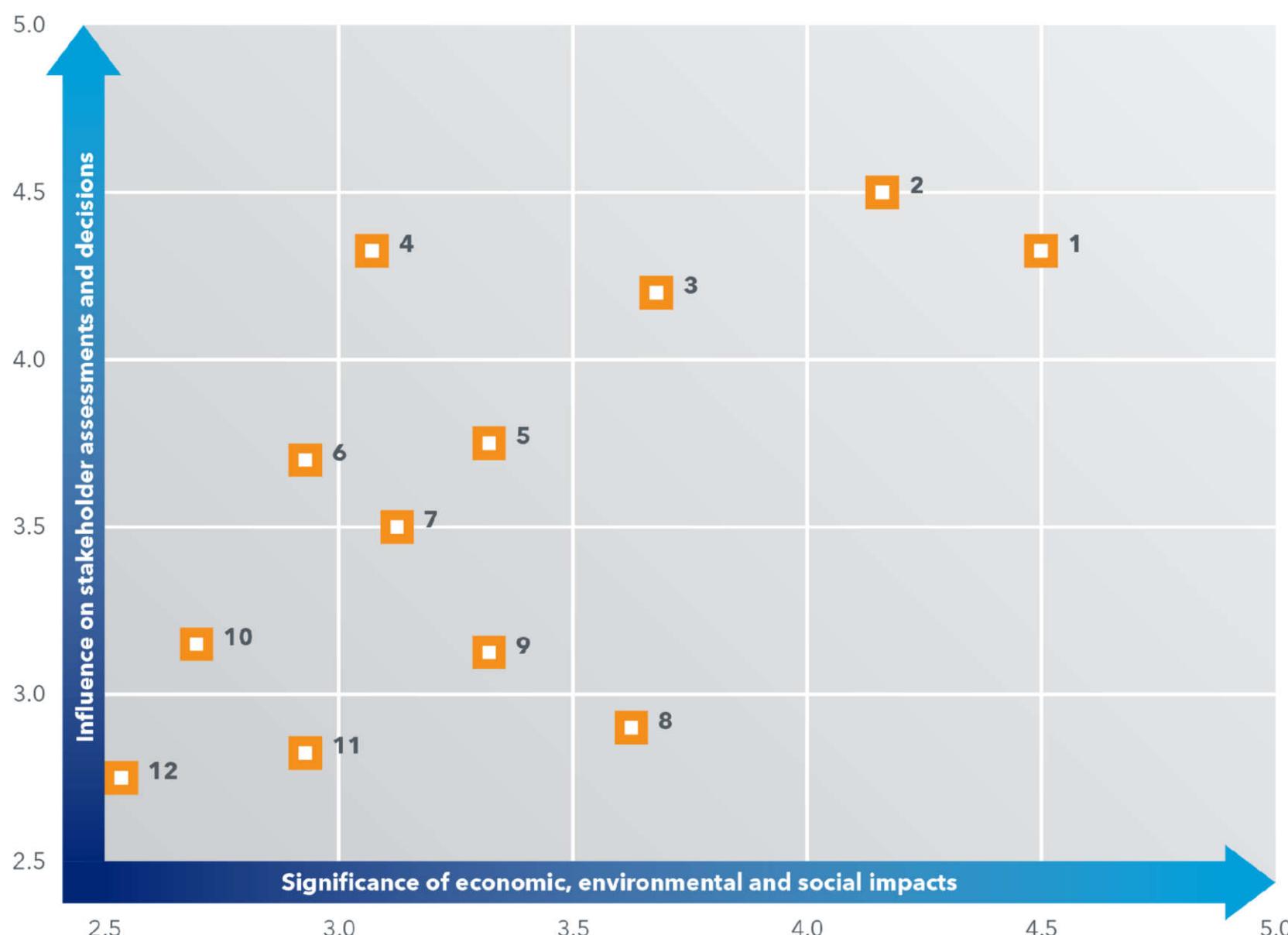
Our principal stakeholders are clients, investors, shareholders and employees. We raise funding from international investors on the international money and capital markets and use it to provide financing to our clients in the Dutch public sector. This enables us to offer our shareholders, the Dutch State and local authorities, a reasonable return. We are able to do this thanks to our employees. We engage with our stakeholders regularly in consultations and meetings and question them through surveys. This dialogue with stakeholders provides us with a clear picture of their expectations and the value we create for them. We use our stakeholders' responses to improve our products, services and processes.

We have a **strong funding position** on the **international money and capital markets** thanks to the **highest external credit ratings**.

1.3 Relevant topics

Material topics have a significant impact on our organisation or are topics over which we can exercise significant influence. To determine which topics are most relevant to us and our stakeholders, and are therefore material, materiality analyses are carried out on a frequent basis. In 2017, we carried out an extensive materiality analysis. The resulting materiality matrix was updated in 2018, and the number of material topics was reduced from 25 to 8 by clustering various topics. For 2019, an entirely new materiality analysis was carried out among internal and external stakeholders. All possible topics were taken into consideration and a 'long list' was drawn up of 200 relevant, non-financial topics that can be reported on, tailored to the financial sector. These topics were consolidated into 12 material topics. Following consultation with our stakeholders, a materiality matrix was drawn up based on the assessment made by various stakeholders. A detailed description of the materiality analysis can be found on the [website](#). Based on the survey, a materiality matrix was drawn up showing the prioritisation from our stakeholder groups' perspective along the vertical axis and the prioritisation on the internal side along the horizontal axis. The materiality matrix is shown below. The definitions of the x-axis and the y-axis of the matrix are based on the [GRI Standards](#) in accordance with which this Annual Report has been prepared. The 'Influence on stakeholder assessments and decisions' indicates the external prioritisation by our stakeholders and the 'Significance of economic, environmental and social impacts' indicates our own internal prioritisation.

Materiality matrix



Material topics

- | | |
|---|---|
| 1. □ Affordable financing | 7. □ Data security |
| 2. □ Sustainability financing | 8. □ Reasonable return |
| 3. □ Ethics and compliance | 9. □ Efficient organisation |
| 4. □ Partnerships aimed at increasing sustainability | 10. □ Employees with future-oriented skills |
| 5. □ Stimulating sustainable operations among clients | 11. □ Attractive employer |
| 6. □ Innovative products and processes | 12. □ Sustainable operations |

The material topics and related definitions are included in the [Glossary](#).

The relationship between the material topics, the associated objectives, the results achieved and the impact on stakeholders is shown in the connectivity table. A link is also made between material topics and the SDGs, the applicable GRI aspects and the sections in which the management approach in respect of the material topic is explained further. The complete connectivity table is presented in the '[Connectivity information](#)' section.

1.4 Creating value

We create value by being a relevant player in the financing of the Dutch public sector, by providing financing at the lowest possible cost and by aiming to achieve a reasonable return. The value creation table below shows how we use the available resources to create value and what returns this enables us to generate.

Value creation model



1.5 In contact with stakeholders

We invest in long-term relationships with our stakeholders through regular dialogue with them by way of consultations, regional and sector meetings and surveys. Twice a year, we organise the Client Council, consisting of a permanent group of approximately 10 board members from various client groups. We exchange ideas with them on strategic issues that are important to BNG Bank and clients alike. For our municipal authority clients, we organise an annual meeting for '30,000+' and '100,000+' municipalities at which matters of topical interest to municipalities are discussed. In 2019, we also made a substantive contribution, among other things, at municipal property days for healthcare, education, municipal and housing association real estate.

Reputation survey

In 2019, we commissioned a reputation survey among shareholders, clients, public authorities, regulators and media contacts to gauge BNG Bank's reputation and to gain insight into the strengths and blind spots of our organisation. We are rated well among all groups, especially on the aspects of 'relationship', 'performance' and 'sustainability'. The latter aspect in particular is something that many parties would like to discuss with us, and the bank is seen as playing an emphatic role in financing the energy transition.

We are viewed as a solid and reliable partner. The bank is financially sound and stakeholders experience good, constructive cooperation. Clients consider the relative certainty and simplicity with which we can provide financing as a strong feature of BNG Bank. Some clients would like to see us adopt a more proactive approach and would like to step up cooperation, where possible. In addition, the personal contacts are perceived as added value. Nevertheless, rates, terms and conditions, and not contacts, are ultimately the most important criteria for selecting a financier. Alternative platforms and forms of financing may therefore pose a threat if they enable our clients to obtain financing cheaply and simply.

Stakeholders see the bank as having an **emphatic role** to play in **financing the energy transition**.

Based on the findings of the reputation survey, we have formulated several points for improvement, including frequent and proactive contact with our clients. We can be clearer about what types of project we do and do not finance, and within what term we can give a definite decision in that regard. Another point for improvement involves highlighting sustainability more clearly in our strategy. These points for improvement have been linked to action parties and set out in the annual plans for 2020. The progress made in relation to them is monitored throughout the year.

1.6 Developments in the environment

Political and economic developments

Uncertain economic and political developments affected business confidence and dented the willingness to make investments in 2019 at an international level. Global economic growth slowed as a result. The trade dispute between the United States and China escalated. Both countries raised their import tariffs substantially, causing trade between them to decline. Brexit also caused economic uncertainty. The British Parliament has now passed the withdrawal agreement, leading to the United Kingdom's official withdrawal from the EU on 31 January 2020. Following the outcome of the UK European Union membership referendum in 2016, we carried out a detailed impact analysis and took measures to ensure the continuity of our business operations going forward.

Despite the challenging market conditions, the Dutch economy performed relatively well. Household consumption grew steadily thanks to increased employment levels. In addition, the government boosted its spending. Business investment increased more than in 2018 on the back of high capacity utilisation. Gross domestic product (GDP) in 2019 increased by roughly 1.6% (2018: 2.6%). Despite the fall, growth remained higher than in the Euro zone. Inflation rose from 1.6% in 2018 to 2.7% in 2019. The rise in prices was caused by the increase of the low rate of VAT and the energy tax. The Dutch government's financial situation remains positive. The government realised a surplus of EUR 9.7 billion in 2019, equal to 1.2% of GDP. Government spending rose by 1.5%. Expenditures on infrastructure, healthcare and defence recorded the largest increase. Gross government debt in 2019 amounted to EUR 398 billion, equal to 49% of GDP. In the 2020 Budget Memorandum, the government announced a combination of tax reductions and higher expenditure. The Netherlands Bureau for Economic Policy Analysis (CPB) expects that the budget surplus will decrease in the coming year as a result.

Economic conditions weakened in the Euro zone as a whole, driving down inflation expectations considerably. The rate of inflation fell to approximately 1%, well below the ECB's inflation target. This prompted the central bank to relax its monetary policy. Securities purchases were resumed in November, conditions were eased and the deposit rate was reduced from -0.4% to -0.5%. Other central banks, including the US Federal Reserve, also cut their interest rates. Largely as a result of these policy measures, interest rates in the Netherlands fell, dropping below zero in August for all maturities up to 30 years. Interest

The **historically low interest rates** are having an impact on our **financial results**.

rates worldwide subsequently rose again slightly on the back of improved economic developments and the hope that the United States and China would agree a trade deal. At the end of 2019, the 10-year Dutch government bond rate was -0.08% (2018: 0.39%). These historically low interest rates therefore have a significant impact on our financial results (see also the [Financial results](#) section).

Technological developments

Technological developments, such as digitalisation of processes to improve efficiency, changing client needs, disintermediation and the technological opportunities awaiting us were discussed in detail within the bank in 2019. We will elaborate this further in the coming years.

Developments in the natural environment

In May 2019, the Council of State ruled that the Nitrogen Action Programme (PAS) may not be used to permit activities that lead to increased nitrogen levels in Natura 2000 sites. This has profound consequences for spatial development. In addition to the nitrogen issue, a standard was set last July for the PFAS group of substances, part of which is potentially carcinogenic and virtually nondegradable. Although the standard for PFAS has since been relaxed, these developments resulted in many projects in the Netherlands being delayed or stopped altogether. Moreover, extreme weather events and major natural disasters, such as flooding and storms, in combination with a lack of effective measures for limiting climate change or adapting to it, are a significant risk worldwide. They can result in the loss of buildings and infrastructure, among other things. The loss of biodiversity, the disappearance of ecosystems with irreversible consequences for the environment and the depletion of resources for people and businesses also constitute a major risk. These developments in the natural environment therefore have a major impact not just on our clients, but also on our own business operations. In our operations, we will focus attention on the impact of climate risks and, where necessary, will take measures in the coming periods. Pursuant to the Climate Agreement, which we signed together with almost the entire Dutch financial sector, we have reported on the CO₂ impact of our lending from 2019 onwards (see the [Impact loan portfolio](#) section). We will carry out a new measurement in 2020 that will enable us to assess the results of 2019 and analyse whether the CO₂ impact of our loan portfolio has changed. We will present an action plan for reducing this CO₂ impact by no later than 2022.

Market developments

Invest-NL and the possible creation of an investment fund, proposed by the government, were important market developments for us in 2019. The most concrete development is Invest-NL, a wholly-owned subsidiary of the State. It was established to help companies finance investments that make the Netherlands more sustainable and innovative and to overcome market failures. Invest-NL is able to invest in innovative projects and/or businesses so as to facilitate important economic and social transitions and assist innovative companies. In 2019, the government also made a proposal to establish an investment fund with the aim of strengthening the Dutch economy in the future. 2020 is expected to bring greater clarity

By **signing** the **Climate Agreement**, we commit ourselves to **contribute** to the **fight** against **climate change**.

regarding its structure and the projects the investment fund will finance.

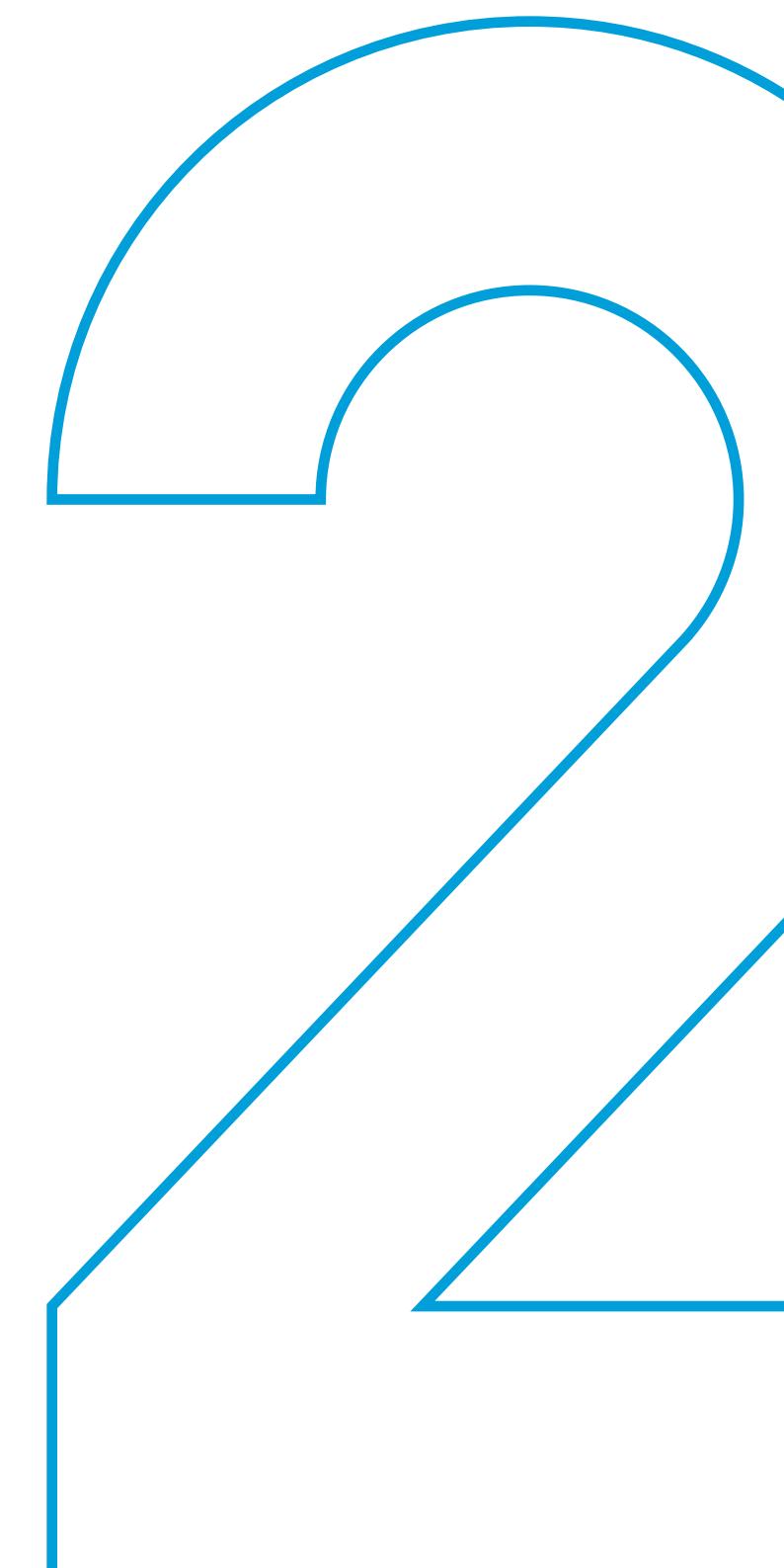
Risks and opportunities / SWOT

Our strengths and weaknesses and our main opportunities and threats are shown below. This so-called SWOT analysis is based on the SWOT analysis appearing in the 2018 Annual Report, in combination with the results of the [reputation survey](#), the [materiality analysis](#), the [employee survey](#) and the [culture assessment](#).

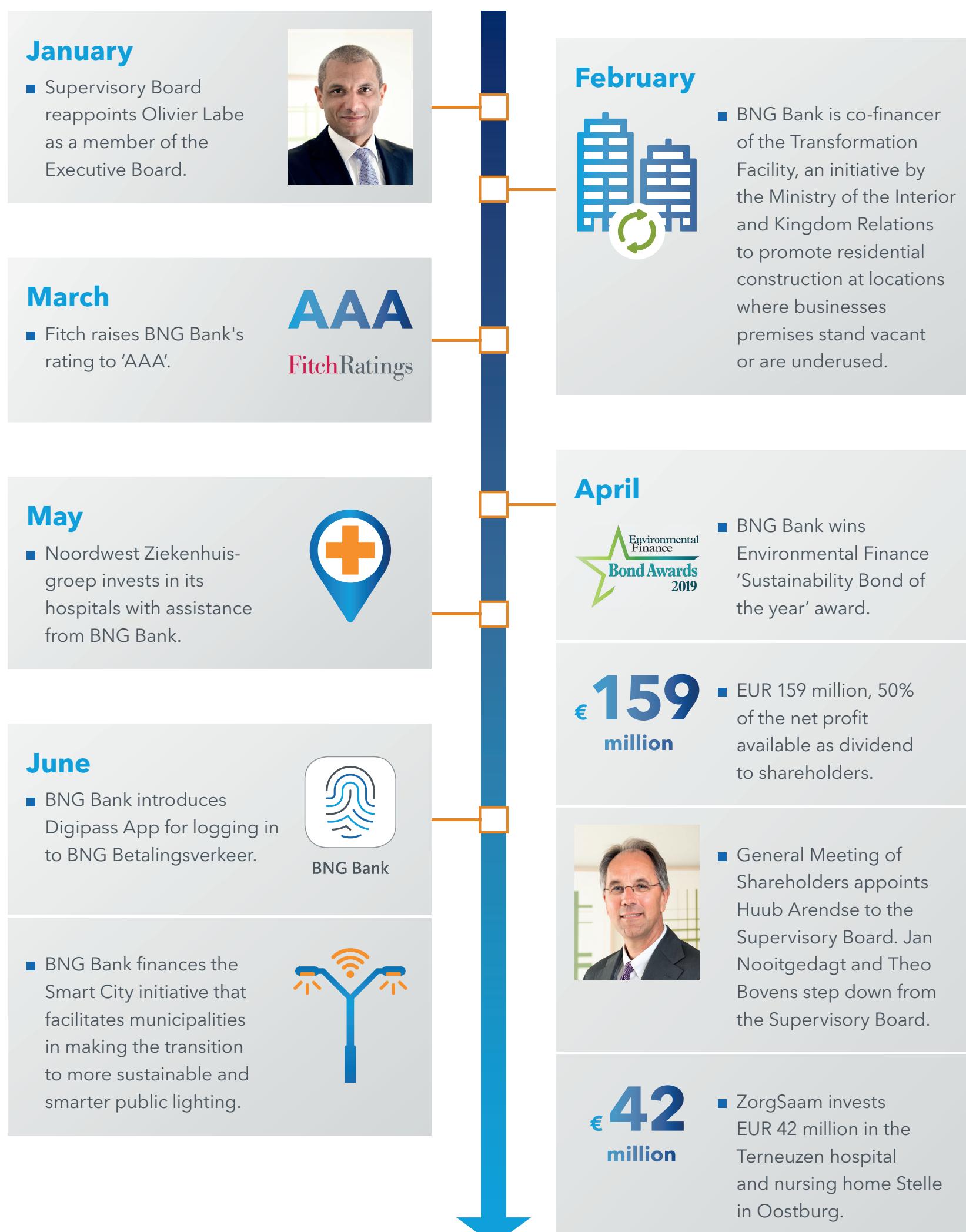


Our contribution in 2019 and outlook

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Significant events in 2019





2.1 Financial results

Result and return

BNG Bank achieved a net profit of EUR 163 million for the 2019 reporting year. The main reasons for the decrease of EUR 174 million compared with 2018 are a lower result on financial transactions and higher provisions for credit losses. The return on equity of 3.6% is lower than the target of 3.7%.

At EUR 435 million, the interest result is virtually the same as the result for 2018. The increase in the long-term loan portfolio and the favourable lending rates for new funding raised had a positive impact on the interest result in 2019. The relatively large volume of early repayments on long-term loans meant that the contribution of results on sales to the interest result was also unexpectedly large at EUR 15 million. However, the bank's interest result is coming under pressure as a result of the historically low interest rates. As a consequence, the bank's equity generates increasingly low returns.

The result on financial transactions was EUR 37 million positive in 2019 (2018: EUR 112 million positive). This relates to realised value adjustments in the amount of EUR 21 million, largely due to changes in the liquidity portfolio. The unrealised market value adjustments show a diverse picture. Positive results are mainly due to the revaluation of the credit component of the interest-bearing securities in the financial assets balance sheet item at fair value through the income statement. The sharp decrease of the interest rate in particular adversely impacted the credit component of the interest rate swaps concluded with customers and the swaps entered into in order to hedge the market risks of the interest-bearing securities referred to above. Owing to the continuing volatility of the financial markets, the bank's results will remain sensitive to these market value adjustments, which lead to unrealised results until the maturity of the underlying transactions.

Consolidated operating expenses in 2019 rose to EUR 81 million, up EUR 5 million relative to the previous year. The bank's costs are rising owing to investments in information technology and the hiring of internal and external staff. These investments are necessary to make processes more efficient and to ensure an adequate response to the ever-increasing requirements imposed by regulations and regulators.

The bank's contribution to the European Resolution Fund in 2019 was set at almost EUR 8 million. The decrease of EUR 4 million relative to the contribution in 2018 was caused by the strong decrease in the balance sheet total in 2017 compared with the balance sheet total at year-end 2016. The contribution to the statutory bank levy in 2019, which was

determined on the basis of the balance sheet at year-end 2018, amounted to EUR 30 million.

Write-downs for credit losses in 2019 amounted to EUR 153 million. This high amount from a historical perspective is mainly due to the reduced creditworthiness of a counterparty who provides services to municipalities. Although the level of creditworthiness of the loan portfolio is high on average, problems in incidental cases cannot be excluded. In addition, the less favourable economic developments led to an increase in expected credit losses. Impairments in some participating interests of BNG Gebiedsontwikkeling on balance stood at EUR 7 million.

The balance sheet total increased in 2019 by EUR 12.2 billion to EUR 149.7 billion, mainly due to the lower long-term interest rates, which can be seen in the increase in the balance sheet items Derivatives, Cash collateral, Debt securities and Value adjustments on loans involved in portfolio hedge accounting. The item Loans and advances increased by more than EUR 3.3 billion, mainly due to the growth in long-term loans.

The bank's equity decreased in 2019 with EUR 0.1 billion to EUR 5.0 billion. The net profit over 2019 did not fully compensated for the dividend payments over 2018 and the decrease of the unrealised reserves. The risk-weighted solvency ratios remained stable compared with year-end 2018; the Common Equity Tier 1 ratio and the Tier 1 ratio were 32% and 38%, respectively, at year-end 2019. The bank's leverage ratio decreased by 0.2% compared with year-end 2018 to 3.6%, as a result of the increase in the balance sheet total.

In line with our dividend policy, we propose to pay out EUR 71 million (2018: EUR 159 million) to shareholders. This equals 50% of the net profit after deduction of the dividend distribution to providers of hybrid capital. The dividend amounts to EUR 1.27 (2018: EUR 2.85) per share.

Lending and funding

At EUR 14.0 billion, the volume of new long-term lending in 2019 was significantly higher than expected. The increasingly lower interest rates for long-term loans contributed to the high demand for long-term loans. The demand for credit from local authorities and the healthcare sector in particular was higher than expected. The share in solvency-free long-term lending to local authorities, housing associations and healthcare institutions amounted to approximately 71%, the same as in 2018. As a result, the target of 55% was amply achieved.

As a result of the relatively high volume of new long-term lending in 2019, the long-term loan portfolio rose to EUR 84.2 billion, up EUR 2.6 billion relative to year-end 2018. With a score of more than 93% at the end of 2019, the target that at least 90% of long-term loans in the balance sheet must qualify as promotional loan has also been met. The average level of outstanding short-term loans to clients was EUR 4.2 billion, the same as in 2018.

In 2019, we raised EUR 17.8 billion (2018: EUR 18.4 billion) in long-term funding, by issuing six benchmark loans – in euros and US dollars – ranging in size from 500 million to 3.0 billion, among other things.

We propose to pay out **50%** of the profit available to shareholders as **dividend** to them.

In line with the demand for long-term loans, the average maturity of the raised funding increased. Owing to the bank's good credit ratings and the favourable market conditions in the international capital markets, we were able to raise long-term and short-term funding at attractive prices.

Financial targets and results

2019 targets	2019 results	2018 results
The return on equity is above the return criterion set by the Ministry of Finance: >3.7%.	3.6%	8.5%
The external ratings of Moody's, S&P and Fitch are the same as the ratings of the State of the Netherlands.	Achieved. Moody's: Aaa, Standard & Poor's: AAA and Fitch: AA+.	Moody's: Aaa, Standard & Poor's: AAA and Fitch: AA+.
Leverage ratio ≥3.4%.	3.6%	3.8%
Tier 1 ratio ≥23.5%.	38%	38%
Share of promotional loan in portfolio ≥90%.	93%	93%
Growth of the loan portfolio compared with year-end 2018.	Achieved.	Achieved.

Selected financial data

Credit volume



€ 14.0 billion



Balance sheet total



€ 149.7 billion



Net profit



€ 163 million

Proposed dividend

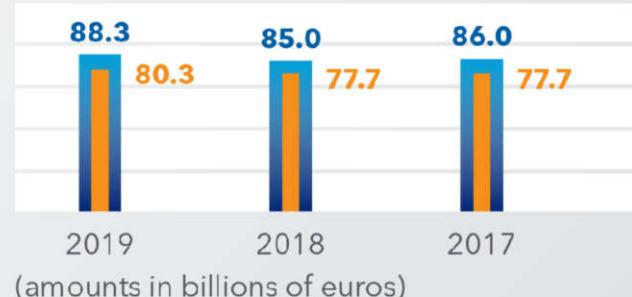
Available to shareholders

€ 71 million

Total credit volume



€ 88.3 billion

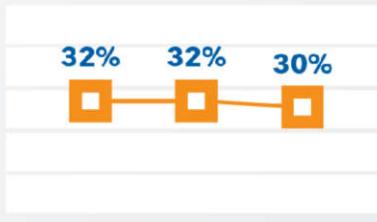


- Total credit volume
- Of which granted to or guaranteed by public authorities

Common Equity

Tier 1 ratio

32%



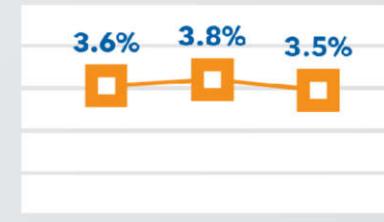
Tier 1 ratio

38%



Leverage ratio

3.6%



(in %)

(in %)

(in %)

2.2 Local authorities

Selected financial data for the public sector



Developments in the sector

The implementation of the Climate Agreement and the energy transition are key topics for local authorities, and will continue to be in the coming years as well. Uncertainty surrounding the choices to be made and the role that local authorities must play in that regard lead us to expect considerable development among municipalities but little demand for lending in these areas in the short term. As a bank, we are nonetheless actively committed to sharing knowledge and to advising on strategic choices and decision-making in relation to real estate. Providing financing for energy cooperatives, citizens' alliances, companies and municipalities that are committed to generating, transporting and using sustainable energy under collective management is a spin-off for the bank.

The measures introduced to reduce nitrogen and PFAS levels had a considerable impact on local authorities in 2019. Many local plans and projects have been delayed, which has had an impact on our loan portfolio. Furthermore, many municipalities are facing issues surrounding the decentralisation of government tasks. This not only costs the municipalities considerable time and energy, but also leads to budgetary tensions, which in turn result in expenditure cuts, deferral of projects and maintenance and reduced demand for lending. Several collaborations between municipalities facilitating joint administrative organisation

were terminated due to differing expectations, among other things. There were no municipal revisions in 2019.

BNG Bank is the principal banker for many municipalities. This means that we process the payments for the municipality concerned and provide them with current account services, among other things. In this arrangement, municipalities pay attention, among other things, to the efficiency of the payment transaction services, the interpretation of 'partnership' and 'social return'. In 2019, we became the principal banker for the municipality of Utrecht through a European tender and our position as principal banker for the municipalities of Katwijk and Midden-Delfland, among others, was extended. We assisted 35 revised municipalities in structuring their payment transactions.

Transformation Facility

February 2019 saw the launch of the Transformation Facility, a scheme for residential construction at locations where businesses premises stand vacant or are underused. Although outdated industrial estates and office parks are usually located attractively, plans are often hampered by insufficient advance financing. The new facility will ensure short-term loans in the initial phase, allowing residential construction to be sped up. This involves loans with a maximum term of five years at a maximum amount of EUR 3.5 million per project. The central government and BNG Bank are each reserving 38 million euros for this purpose. A number of provinces will also be investing funds in boosting the transformation. The Dutch Municipal Housing Incentive Fund (SVn) will act as point of contact, and will also implement and manage the facility. The first projects have already commenced.

Public Real Estate Scan

From late 2017 until the end of 2019, we offered our clients the Public Real Estate Scan free of charge as a tool to improve the sustainability of their real estate. This online tool provides a quick overview of the necessary measures to improve the sustainability of real estate and the costs involved. The scan reveals the current energy label, the energy reduction measures, the necessary investment, including payback period, and the potential improvement in the energy label as well as the expected CO₂ reduction.

Transition to smart, sustainable lighting

In 2019, we financed the Smart City initiative that helps municipalities to finance, replace and improve the sustainability of public lighting. Renkum was the first municipality to take advantage of the initiative. The Smart City Nederland initiative invests in street lights, and the municipality then sources public street lighting as a service from Smart City Nederland. In the future, street lights can be used for other purposes, such as measuring air quality, mobile Internet applications, managing traffic flows, electric vehicle charging points or providing camera surveillance for public order and safety.

Social return

Successful bidders in tenders issued by public authorities are legally obliged to make a contribution to Social Return On Investment (SROI). SROI can be met by employing someone with limited access to the labour

Climate change and the energy transition will be important themes for local authorities in the coming years.

market, for instance. It is not easy for BNG Bank to fulfil this condition, since we are based in The Hague and our clients are spread across the entire country. We therefore also look for other ways of generating social value, by contributing to social projects, for example, or by using a platform to bring together demand and supply in relation to social initiatives.

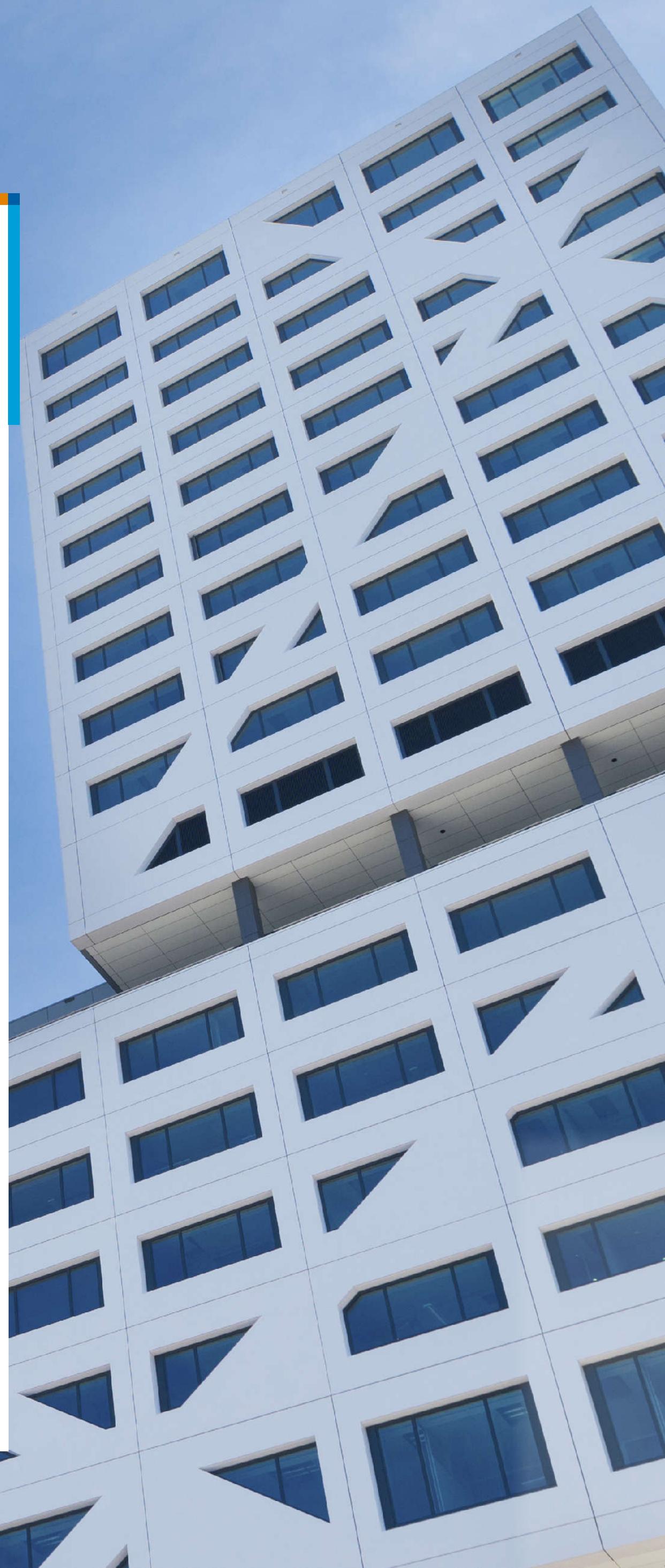
Principal bank for another large municipality

The municipality of Utrecht chose BNG Bank as its principal banker last year. After The Hague, Utrecht is the second of the four biggest municipalities in the Netherlands to have selected BNG Bank through a European tender. Considerable attention was focused on sustainability during the tender process. Utrecht is keen to see the agreement, which will run for a maximum of 10 years, contribute to its sustainability goals.

Councillor Anke Klein: 'Particular emphasis was placed on sustainability in the tender process. We assessed banks not just for suitability, but also drew up a list of requirements in terms of price, sustainability and additional services. Of the four banks that submitted a tender, BNG Bank ranked highest on all our requirements'.

Comfortable buildings

The municipality of Utrecht and BNG Bank have a long-standing working relationship covering multiple fields. In addition to loans, we have provided prepaid debit cards for minimum-income households. We also support the municipality in implementing a Digital Housekeeping Book that helps all residents of Utrecht to manage their finances. We work with housing associations, healthcare institutions and educational institutions in Utrecht to make their buildings more sustainable. Good air quality, effective insulation and adequate daylight guarantee a more comfortable and healthy living environment at home or in school.



2.3 Housing associations

Selected financial data for housing associations



Developments in the sector

We organised five regional meetings in 2019 for our clients in the housing association sector. During these meetings, we discussed a range of issues, including developments in the sector, to what extent low-cost lending will continue to be available in the future and BNG Bank's role in relation to these matters.

After a prolonged period of reduced investments by housing associations, leading to a decrease in our loan portfolio in this sector, housing associations are beginning to invest more again. The pressing need for social housing remains, and it is the job of housing associations to provide for this need. Making private home ownership more sustainable is also an important theme for housing associations. The agreements in the Social Rent Agreement have the effect of limiting rent increases, which has implications for the revenues of housing associations. At the same time, housing associations' expenditure is rising, due to increased building costs and a scarcity of building land, among other things. The nitrogen issue that arose in 2019 also gets in the way of an increased level of investment by housing associations. The government has undertaken to reduce the tax on housing associations by EUR 1 billion to encourage new construction by housing associations.

Mid-range rent housing

The mid-range rent housing segment is affected by significant shortages in the supply of suitable housing. Mid-range rent housing refers to housing that is slightly more expensive than social housing and caters to middle income households. These households do not qualify for social rented accommodation, but cannot afford to buy their own property, or they opt to rent on the open market for reasons of flexibility. Mid-range rent housing facilitates movement in the housing market and helps to create more mixed neighbourhoods and complexes, making them better places to live. We have noticed is an increasing trend among housing associations to explore the potential of this market segment for their operations.

Housing associations focus on 'services of general economic interest' (SGEI), such as building, letting and managing social housing. Other non-SGEI activities, such as providing mid-range rent housing, are subject to more stringent requirements and housing associations may only engage in these activities if commercial organisations show no interest (the 'market test'). The current lack of sufficient interest in mid-range rent housing among commercial organisations presents housing associations with increased opportunities in this segment. In December 2019, we were able to provide a large loan for mid-range rent housing to a housing association in the Eindhoven region. This loan will be used to build mid-range rent housing in the coming years, to meet the high demand for these homes in the region.

Sale of public real estate by housing associations

Housing associations are critically reviewing their core function and associated real estate portfolios. Sometimes, this results in public real estate being sold. In Friesland, we financed a market player that acquired educational properties owned by a housing association and rented to municipalities and educational institutions . Financing of this nature allows us to support civil society organisations in achieving their objectives in two ways. The financing frees up resources that the housing association then utilises in the social rental sector. The transaction also ensures that the properties remain available to tenants for many years, and hence remain available for social functions.

We expect **mid-range rent housing** to become increasingly **important** in the **housing market** and for **housing associations**.



Crailo: living among nature

The Crailo former barracks connect the nature conservation areas that lie to the south and north of the A1 motorway. Three municipalities in the Gooi region bought the site in 2017 for housing construction. Almost half the site is reserved for existing and new green space, and for new nature conservation areas.

Approximately 13 hectares are earmarked for housing. Of the 500 homes that will be built, one third will be used for social housing. BNG Bank is providing EUR 20 million, backed by a municipal guarantee from the municipalities of Gooise Meren, Hilversum and Laren, to finance the project.

2.4 Healthcare sector

Selected financial data for the healthcare sector



Developments in the sector

The healthcare sector is experiencing declining investments, resulting in lower demand for financing, brought on by uncertainties concerning overcapacity, staff shortages and low returns, among other things. This is also reflected in the guarantees issued by the Guarantee Fund for the Healthcare Sector (WFZ), which have decreased in recent years. The government has pursued a policy of decentralisation of government tasks in recent years, with municipalities taking over many tasks from central government, subject to certain conditions. The aim was to bring the organisation of healthcare and support closer to the local community, resulting in more tailored services and saving costs. The limits of decentralisation and regulated operation of market forces in healthcare are now clearly visible. In mid-2020, the government will present an outline policy memorandum that will set out the government's plans to reassume greater responsibility for many aspects of the coordination of healthcare.



Refurbishment of hospital and elderly care in Zeeuws-Vlaanderen

ZorgSaam Zorggroep Zeeuws-Vlaanderen provides home care, care for the elderly, hospital care and ambulance services throughout Zeelandic Flanders. The healthcare group aims to improve the health of people in the region by organising a solid and reliable range of care services.

ZorgSaam is investing EUR 42 million in the hospital in Terneuzen and the Stelle nursing home in Oostburg. The plans for the De Honte hospital include an ultramodern operating centre, among other things. The 30-year old hospital will also be partly refurbished and updated, so it can continue to provide services for several decades to come. The Stelle nursing home will be transformed into a building with a spacious and contemporary residential, working and living environment. The financing contributes to the quality of care in Zeelandic Flanders. We are therefore proud that ZorgSaam has chosen us to be their principal banker.

'Sustainable healthcare for a healthy future' Green Deal

The healthcare sector faces a major sustainability challenge that involves significant costs. In 2018, we co-signed the 'Sustainable healthcare for a healthy future' Green Deal, together with several other banks. Agreements were made with 131 other parties in the healthcare sector aimed at making healthcare in the Netherlands more sustainable. We act as a financier of the healthcare sector in this endeavour, and recognise the importance of the healthcare sector's proposed contribution to climate objectives. The many other challenges facing the sector mean there is no pressing urgency just yet. It is also uncertain whether sufficient resources will be made available to cover the costs of the measures to be implemented. Substantial differences among the care providers remain as regards the steps to be taken.

Ultramodern operating facility among the trees

The new wing of the Sint Maartenskliniek hospital in Nijmegen was officially opened at the end of 2019. The wing has been built with an emphasis on facilitating functional care. What do the operating theatres of the future look like? The seven new theatres measuring 55 m² – instead of 25 m² – are safer, better designed and equipped with the latest digital innovations.

The new rehabilitation clinic has been designed in line with innovations in the field of ICT and treatment of patients. These innovations have consequences for the layout, financing and support. The clinic is recognised as a leading centre in the Netherlands thanks to its excellent reputation and specialisation. The hospital is assessed on the basis of performance indicators set by the national Inspectorate for Health and Youth Care. A further, specific set of performance indicators has been set for rehabilitation care (in consultation with Revalidatie Nederland).

A characteristic feature of the entire new wing is the connection with the natural landscape surrounding the clinic. Daylight streams into all the interior spaces, including the operating theatres. Between 10 and 15 per cent of the built-on area will be returned to nature. The clinic can make do with less floor space since patients are treated on an outpatient basis at multiple locations in the Netherlands, and it prioritises continuation of its current services over growth for less complex care needs. BNG Bank financed the new building together with ABN Amro. Finance Ideas was the link between the clinic and financiers.



2.5 Education

Developments in the sector

The financing of educational properties in senior secondary vocational education, higher education and universities is provided for in our education market segment. Educational properties in primary and secondary education are generally financed through municipalities. In 2019, we organised the BNG Bank Education Days to raise BNG Bank's profile among school boards and to provide insight into the support we can provide in making properties more sustainable. There are still many opportunities in the education sector for increasing the sustainability of properties, as well as for improving the indoor environments in schools. When it comes to primary and secondary education, municipalities play an important role in this regard. In the case of senior secondary vocational education, higher education and universities, the institutions themselves largely have control over the properties. There are differences, therefore, in the approach toward improving sustainability.



The world's most sustainable educational facility

BNG Bank is one of the parties lending to Eindhoven University of Technology (TU/e). The renovation of the Atlas building on the Eindhoven University of Technology (TU/e) campus was completed last spring. The former main building of the TU/e dated from 1963 and was in need of renovation. The building's CO₂ emissions have been reduced by around 80 per cent, while the number of users has more than doubled. This significant reduction is partly due to the highly insulating glass facade and the fact that the building's connection to the gas grid is shut off. Heat and cooling now come from the campus-wide ground-coupled heat exchanger of TU/e.



2.6 Energy and infrastructure

Selected financial data for the energy sector

Financing loans for wind farms in 2019



€ 288 million

Financing loans for solar farms in 2019



€ 160 million

Developments in the sector

The Energy and Infrastructure sector covers the project financing we undertake in the area of energy, infrastructure, mobility and the environment. Our sustainable projects revenue increased by 45% in 2019 to EUR 505.4 million (2018: EUR 349.7 million).

This sector faces major challenges and substantial investments are required. Making property more sustainable, increasing the share of energy generated in a sustainable way and replacing heating by natural gas with alternative sources of heat are the three pillars on which the energy transition is based. Making a contribution to the energy transition is one of our main sustainability efforts. We assist with the financing of major projects in these sectors. We have already financed various geothermal energy projects, alongside the financing provided for other forms of renewable energy, such as solar farms, wind farms and the use of residual heat.

Solar and wind farms

We provided various project financing loans for solar and wind farms in 2019. The addition of solar and wind farms makes an important contribution to the energy transition in the Netherlands and the reduction of CO₂ emissions. When solar and wind parks are being developed, attention is paid to how they are integrated into the surroundings as well as biodiversity on the site. When

Making a contribution to the **energy transition** is one of our **main sustainability efforts**.

granting loans, we will always need to carefully weigh the many different types of impact that can ensue from a project.

Geothermal energy

In 2019, among other things, we financed the expansion of district heating networks, to provide sustainable heating to greenhouses for the production of vegetables, fruit and plants, for example. The development of sustainable, local heat sources such as geothermal energy is hugely important for increasing the sustainability of the heat supply. The use of these sources is expected to increase massively in the coming years. To encourage this development, we are therefore co-funding a chair in Geothermal Energy at Delft University of Technology.

Biomass power plants

We also financed several biomass power plants in 2019. The plants incinerate organic materials to produce heat and electricity. In this way, biomass replaces fossil fuels, such as natural gas, as an energy source. Biomass is currently the principal source of renewable energy in the Netherlands. While there are plans to build even more biomass power plants in the future, a debate has started about how sustainable biomass actually is. This debate centres on the question of whether sufficient biomass can be produced in a sustainable way in the future without unwanted effects on the climate, biodiversity or the food supply. As long as no broadly supported sustainability criteria for biomass exist that provide certainty regarding the sustainability of biomass as a raw material and that prevent negative effects, we believe it is important that the power plants we finance have reliable suppliers, such as municipal authorities and Staatsbosbeheer.

2.7 BNG Sustainability Fund

Since 2018, the BNG Sustainability Fund has financed business projects that contribute to the sustainability objectives of municipalities or provinces and grants loans ranging from EUR 100,000 to EUR 2.5 million. The Fund facilitates sustainability initiatives in the environmental field, such as sustainable energy generation and energy-saving measures, as well as in the fields of healthcare, housing and education. In this way, the Fund contributes to a future-proof, more energy-neutral society. Through the Fund, we respond to the growing demand for simple financing for sustainable projects.

The BNG Sustainability Fund is an initiative of BNG Bank for which we initially made EUR 10 million available to the Fund, supplementing our regular lending. The Fund is supported by the Association of Netherlands Municipalities (VNG). The Dutch Municipal Housing Incentive Fund (SVn) is the fund manager.

The BNG Sustainability Fund granted several loans in 2019, including one to make three primary schools of the WSKO educational organisation in the municipality of Westland more sustainable by installing a solar system and dynamic LED lighting. WSKO expects that these energy-saving measures will enable it to cut its energy bills by five thousand euros a year for each school building, in addition to setting an example in the region and contributing to the pupils' development into responsible citizens.

The BNG Sustainability Fund also granted a loan to iwell. This company uses the loan to fund a lease solution for their smart battery system aimed at housing associations and owners' associations. The system stores green energy and distributes it when needed. In 2018, iwell won the Global Goals Social Impact Challenge that is organised by VNG and BNG Bank. The prize consisted of advice and support from BNG Bank to ensure the plan is financially viable and can be implemented. This has now been achieved.

Since January 2020, sports associations have been able to apply for a sports loan from the BNG Sustainability Fund to make their accommodation more sustainable. Thanks to a guarantee underwritten by Stichting Waarborgfonds voor de Sport, it is possible to provide these loans at a very attractive rate of interest.

The **BNG Sustainability Fund** finances business projects that **contribute** to the **sustainability objectives** of municipalities or provinces.

2.8 Impact credit portfolio

Being part of the financial sector, we have committed to the Climate Agreement with a view to contributing to the government's ambitions to reduce greenhouse gas emissions. One of the elements of this commitment is to make the impact of lending and investments on climate change measurable by 2020. To that end, we have joined the PCAF, the Partnership for Carbon Accounting Financials. According to the PCAF methodology, direct and indirect emissions of the client are attributed to the bank on the basis of a set of overarching valuation rules. This methodology is used by a large majority of Dutch banks and a growing number of foreign banks.

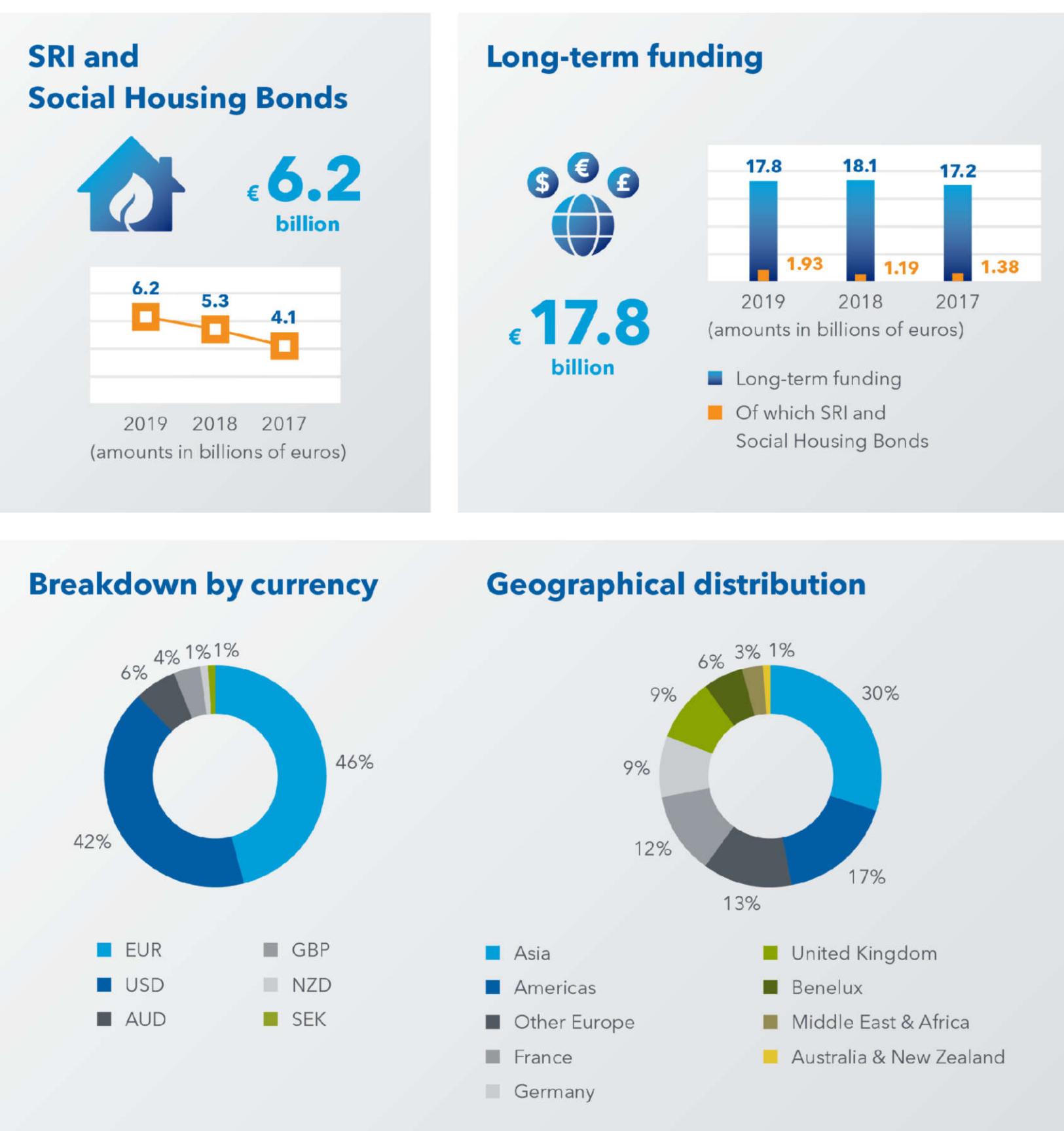
The results of the first impact measurement of our loan portfolio became available at the end of 2019. The calculation was conducted by Telos Institute of the University of Tilburg. The approximate impact of our loan portfolio on greenhouse gas emissions per sector is shown in the table below.

Sector	BNG Bank portfolio as at 31 December 2018 (in EUR million)	Emissions attributed to lending by BNG Bank (ktonnes)	Emissions in tonnes/million EUR	Data quality (1 = accurate 5 = approximate)	% portfolio included in calculation
Public sector	29.748	2.460	88,8	3,0	93,1
Housing associations	40.281	2.381	61,1	2,5	96,8
Healthcare institutions	6.997	305	55,3	2,5	78,9
Education	951	33	49,6	1,75	69,4
Other organisations and Infrastructure	5.080	504	203,6	4,0	50,4
Total	83.057	5.684	75,4		90,7

The impact was calculated by reference to the share of the amounts outstanding in the various sectors at year-end 2018 in the total debt position of the sector. It is often still necessary to resort to sector averages or reasoned estimates in calculations of the emission data of the various sectors. Public sources were used for this. Work is ongoing within the PCAF to improve the data quality of the macro data. The actual emissions have not been measured by ourselves. The [Reporting Principles](#) section contains a detailed description of the methodology and the public sources used. We consider the measurement to be a baseline measurement. The outcomes serve as a guideline for formulating targets in line with the financial sector's commitment to the climate agreement.

2.9 Funding

Selected financial data for funding



Funding is an important activity for our bank to enable us to ultimately provide financing to our clients at the lowest possible rates. Our high external credit ratings provide us with a strong position on the international money and capital markets. This allows us to raise short-

term and long-term funding in various currencies at attractive rates. By far the largest share is obtained through the public issue of bonds on international money and capital markets. A limited share is acquired through so-called private placements. Further information can be found on our English-language [website](#).

In 2019, we raised the sum of EUR 17.8 billion (2018: EUR 18.4 billion) in long-term funding, by issuing six benchmark loans - in euros and US dollars - ranging in size from 500 million to 3.0 billion, among other things. In line with the demand for long-term loans, the average maturity of the raised funding increased. A breakdown by currency and geographical spread is shown in the figure above.

Sustainable bonds

We offer sustainable bonds as a special category of public issues. They are used to finance municipal authorities and housing associations with the highest sustainability scores in their category. We also issue 'green bonds', which are directly linked to sustainability projects.

In 2019, we issued the first 'Renewable Energy Bond' by means of a private placement. This bond is linked to a wind farm project financed by us. We also issued two 'Sustainability Bonds for Dutch Municipalities' and a 'Sustainability Bond for Social Housing Associations' in 2019.

'Sustainable Bond of the year' award

We followed up the award we received in 2018 from Global Capital for 'Most Impressive Social or Sustainability Bond issuer' with the award by Environmental Finance in 2019 for the 'Sustainability Bond of the year', for the seven-year sustainability bond for an amount of EUR 750 million that we issued in November 2018. The proceeds of the bond are used to provide financing to Dutch municipal authorities that are rated 'best-in-class' in terms of sustainability. They are selected on the basis of a methodology developed by Tilburg University's Telos institute, and assessed by sustainability research and ratings firm Sustainalytics.



Sustainable bonds are used to **finance municipal authorities and housing associations** with the highest **ratings** in terms of **sustainability**.

2.10 Outlook for 2020

Financial outlook

We expect the total volume of new long-term lending to approximate EUR 10 billion in 2020. The sale of shares in Eneco by local authorities is expected to have a negative impact on demand for lending. The investment level of housing associations is expected to increase in the coming years as a result of the high demand for social housing. In the healthcare sector, we expect a relatively stable credit demand in the coming years, although lower than in 2019. We aim for a share in solvency-free long-term lending to local authorities, housing associations and healthcare institutions of at least 55%. The target that at least 90% of long-term loans in the balance sheet must qualify as promotional loan remains in place as well. This ratio limits the bank's ability for providing lending due to solvency requirements.

In 2020, the funding policy will continue to be focused on ensuring permanent access to the money and capital markets for the terms and volumes required at the lowest possible rates. We intend to issue at least two benchmark loans (in EUR and USD) as well as two SRI bonds in 2020.

In May 2019, amendments to the European regulations concerning capital requirements were published. Most of the amendments apply with effect from 28 June 2021. The most important change for the bank relates to Article 429, which provides that we can exclude promotional loans from the denominator of the leverage ratio. As a result, the bank's leverage ratio will improve substantially from mid-2021. Because the European Banking Authority has not established all specific provisions of the regulations, no full insight can be provided yet on the effects of the new regulations.

The consequences of the minimum capital rule for the bank will become clearer at the end of 2019. As of 2020, part of the interest expenses on funding transactions of banks and insurers will not be tax deductible if the bank's leverage ratio (LR) at the end of the preceding year was below 8%. This part is determined on the basis of the formula $(8\%-LR)/(100\%-LR)$. Because we are allowed to present the leverage ratio from mid-2021 excluding the promotional loans, the effect on the tax burden will decrease considerably. On the basis of the current expectations, the additional tax charges in 2020 will amount to around EUR 27 million. The additional charges in 2021 are expected to be lower as a result of the announced reduction in the corporate income tax rate in that year to 21.7%.

We expect to grant **EUR 10 billion**
in **new long-term loans in 2020**.

The consequences of the European regulations on benchmark interest rates (BMR) and similar initiatives in other Western countries are coming into clearer focus. The objective of this regulation is that the most important interest rates on the financial markets are based on concluded transactions that are representative for the relevant market. The ECB benchmark working group has introduced €STR (Euro Short Term Rate) as the alternative to EONIA. This interest rate is still the market standard at present for the settlement of interest for cash collateral for derivatives transactions, and hence determines the value of those derivatives. €STR was implemented on 2 October 2019 and will in time replace EONIA. For the valuation of derivatives the central clearing parties LCH and Eurex will switch to €STR on 22 June 2020. Various departments are collaborating to take the necessary measures. This means that the relevant derivatives will decrease in value for the bank on balance and that the bank will receive a one-off payment for this. We are endeavouring to minimise the implications for our balance sheet and income statement.

The consolidated budget for operating expenses stands at EUR 92 million for 2020. Anticipated cost increases relative to 2019 are mainly linked to extensive project-related activities planned in 2020. The bank's workforce is expected to grow by almost 10%. In addition to investing in employees and systems to continue to comply with laws and regulations, we are committed to a programme of extensive digitalisation such as expansion of the customer portal and automation of the credit process. We also take into account a further increase in the costs of supervision to be charged by the ECB and DNB. The contribution to the statutory bank levy in 2020 is expected to be EUR 34 million. We have additionally taken a contribution to the European resolution fund of EUR 8 million into account.

We aim to achieve a return on equity of at least 3.3% in 2020. The low long-term interest rates continue to put pressure on the development of the interest result, which is expected to range between EUR 400 million and EUR 440 million. The corona virus has far-reaching social consequences, also for our customers. It is not yet possible to estimate what this means for the bank. It is impossible to provide a reliable statement on the result on financial transactions. As a consequence, we do not consider it wise to make a statement on the expected net profit for 2020.

Financial objectives for 2020

The return on equity is above the return criterion set by the Ministry of Finance: >3.3%.

Moody's, S&P and Fitch external ratings are in line with the ratings of the State of the Netherlands.

Leverage ratio ≥3.4%.

Common Equity Tier-1 ratio ≥22%.

Tier 1 ratio ≥24%.

Costs within consolidated budget EUR 92 million.

Growth of the loan portfolio compared with year-end 2019.

Share of promotional loan in portfolio ≥90%.

Social outlook

Pursuant to committing to the Climate Agreement, which we signed together with almost the entire Dutch financial sector, we are reporting on the CO₂ impact of our lending. We will make choices regarding new initiatives we develop and the loans we provide. How we manage this, and using what tools, will be key issues in 2020. We will present an action plan for reducing this CO₂ impact by no later than 2022.

ISS-oekom sustainability rating

ISS-oekom, an external rating agency on sustainable investments, upgraded BNG Bank's rating by one step to C+ 'Prime', ranking us among the sustainability leaders in our industry. ISS-oekom rates companies on a scale from D- to A+, with no financial institution ever having been awarded an A rating for sustainability. According to ISS-oekom, BNG Bank's strengths are the bank's lending to companies and projects with high social benefits in the Netherlands, with good environmental and social standards. BNG Bank is also praised for its sustainable bond programmes and its good working conditions. As an area for improvement, ISS-oekom states that the bank should explicitly embed guidelines on sustainability in the credit process and investment policy. While we are pleased that our sustainability rating has been upgraded, we continue to strive for an even greater impact. In order to address the areas for improvement, the credit documentation and the CDD policy with regard to sustainability and human rights are being adapted. We are also working on the implementation of a high risk assessment of countries and sectors and the sustainability policy and human rights policy are being adapted.

In 2019, we further defined and implemented 'My BNG Bank', the client portal for our combined online services in a single environment. The portal allows clients to access their payment transactions and provides them with insight into their loans as well as a digital message box. A large number of IT projects are planned in 2020, including the further roll-out of My BNG Bank and the digitalisation of financial transactions, in addition to existing, ongoing projects and new projects. Special attention will be paid to completion of the 'data insight' long-term programme. This is focused on providing one central database, establishing data governance and improving data quality.

An active career policy, focused on personal agility and development, will be an important topic in 2020. We will support this with personal coaching and resources from the training and mobility budget, among other things. We will also actively and creatively create opportunities for changing jobs, where feasible.

The **focus on sustainability** in our lending remains **key** in **2020**.

Our social objectives for 2020 are linked to the material topics in the following overview.

Social objectives for 2020

Material topic	Objectives for 2020
Market share of loans and advances, granted to or guaranteed by public authorities ≥55%.	Affordable financing
Market share of loans and advances to municipalities, granted to or guaranteed by public authorities ≥60%.	Affordable financing
CO ₂ impact of the loan portfolio measurable.	Financing sustainability efforts Encouraging responsible business conduct among clients
ISS-oekom C+ sustainability rating.	Financing sustainability efforts
New business initiatives from development into production.	Innovative products and processes
Expanding scope for new activities in the portion of the portfolio subject to solvency requirements.	Innovative products and processes
Availability of payment transactions ≥99.9%.	Efficient organisation
Client satisfaction with payment transactions ≥8.	Efficient organisation
Decrease in average time spent doing the same job.	Employees with future-oriented skills
Utilisation of training and education budget increased to ≥75%.	Employees with future-oriented skills
Average age of workforce <47.	Attractive employer
Percentage of men: at least 40%, percentage of women: at least 40%.	Attractive employer
Percentage of employees with limited access to the labour market ≥2.2%.	Attractive employer
Results of 2020 culture assessment improved relative to 2019.	Attractive employer
Reduction in BNG Bank CO ₂ footprint compared with 2019 ≥10%.	Sustainable business operations
Energy costs of office building ≤130 kWh/m ² .	Sustainable business operations

Governance and internal business operations

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3.1 Structure

BNG Bank is a statutory two-tier public limited company under Dutch law that was founded in 1914 as Gemeentelijke Credietbank N.V. on the initiative of the Association of Netherlands Municipalities. Following several earlier name changes, the formal name of Bank Nederlandse Gemeenten N.V. was changed to BNG Bank N.V. in 2018. All our services are now provided under this name. The bank's shareholders are Dutch public authorities exclusively. Half of the bank's share capital is held by municipal authorities, provincial authorities and a water board. The other half of the share capital is held by the Dutch State. We receive no financial assistance or benefits from the government. Our balance sheet total makes us the fourth-largest bank in the Netherlands. We are a bank of national systemic importance under the direct supervision of the ECB. We have one branch, which is established in The Hague. There were no significant changes regarding the bank's size, structure, ownership or supply chain in 2019.

Subsidiaries and participations

BNG Bank has two wholly-owned subsidiaries, both of which are being wound down. BNG Gebiedsontwikkeling B.V. is specialised in risk-based participation in land development, process design and process guidance for municipalities and other public or semi-public organisations. The Supervisory Board of BNG Gebiedsontwikkeling and the Executive Board of BNG Bank decided in March 2018 not to start any new activities or projects within BNG Gebiedsontwikkeling and to complete the projects within the existing portfolio in the next few years. Hypotheekfonds voor Overheidspersoneel B.V. used to issue mortgages for public sector employees. It was decided to discontinue this product and to accept no new clients from 2013. Hypotheekfonds voor Overheidspersoneel has no employees. Both subsidiaries are included in the consolidated financial statements, but are not described in this Annual Report.

Furthermore, we have two significant participations. The first participation concerns Dataland B.V., a municipal non-profit initiative with activities that lead to the broad accessibility of all possible data concerning registered property from the information domain of municipalities and/or other public bodies. The second participation concerns Data B Mailservice Holding B.V. This company provides print and mail services and services relating to payment transactions, direct marketing and message traffic, among others to government institutions.

By balance sheet total,
we are the **fourth largest bank**
in the **Netherlands**.

We are a member of the Dutch Banking Association (NVB), the European Association of Public Banks (EAPB) and the International Capital Market Association (ICMA).

No acquisitions or divestments took place in 2019.

Governance structure

BNG Bank has a two-tier governance structure consisting of a Supervisory Board and an Executive Board. The Supervisory Board's task is to monitor the policy of the Executive Board and the general course of affairs in the company and its affiliated enterprise. The members of the Supervisory Board are appointed and dismissed by the General Meeting of Shareholders. The Supervisory Board has four committees: the Audit Committee, the Risk Committee, the HR Committee and the Remuneration Committee. The committees prepare decision-making by the Supervisory Board. The responsibilities and activities of the Committees are described in further detail in the [Report of the Supervisory Board](#) section.

The Executive Board is charged with the day-to-day management of the bank. The Executive Board consists of three members, including a Chair. The Chair and other members of the Executive Board are appointed and dismissed by the Supervisory Board. Members of the Executive Board are appointed for a period of four years, after which they can be reappointed by the Supervisory Board for additional periods not exceeding four years at a time. The Supervisory Board assesses the performance of the Executive Board each year. The Executive Board has allocated its duties in such a way that individual members are given responsibility for specific components of the Executive Board's management duties. The Executive Board meets on a weekly basis.

3.2 Organisation and management

Composition of the Executive Board

Gita Salden, Chair, is responsible for public finance/lending, marketing and communications, organisational development/HR policy, the internal audit department, strategy, the Executive Board secretariat and economic research. In addition, she is responsible for general coordination and stakeholder relations. She is Chair of the Executive Board and the Management Board. In connection with her position at BNG Bank, she is a board member of the Dutch Banking Association (NVB).

Olivier Labe, CFO, is responsible for financial reporting, financial markets and treasury, asset & liability management, capital management, investor relations, legal and tax affairs, and sustainability. He is Chair of the Capital Policy and Financial Regulations Committee, the Investment Committee and the Sustainability Committee. In connection with his position at BNG Bank, he is Chair of the Supervisory Board of BNG Bank subsidiary Hypotheekfonds voor Overheidspersoneel B.V. and a member of the Supervisory Board of the BNG Sustainability Fund (Stichting BNG Duurzaamheidsfonds). He also sits on the Supervisory Board of ASR Vermogensbeheer N.V. and is a member of the Advisory Board for the Faculty of Economics and Business at the University of Amsterdam.

John Reichardt, CRO, is responsible for compliance, risk management, external supervision (ECB, DNB and AFM), processing, and data and information management. In addition, he is Chair of the Credit Committee as well as of the Financial Counterparties Committee. In connection with his position at BNG Bank, he is Chair of the Supervisory Board of BNG Gebiedsontwikkeling B.V., a Supervisory Board member of Hypotheekfonds voor Overheidspersoneel B.V., Chair of the Supervisory Board of Data B. Mailservice Holding B.V., and a member of the Supervisory Affairs Committee of the Dutch Banking Association (NVB). He is also a Supervisory Committee member of the RDW.



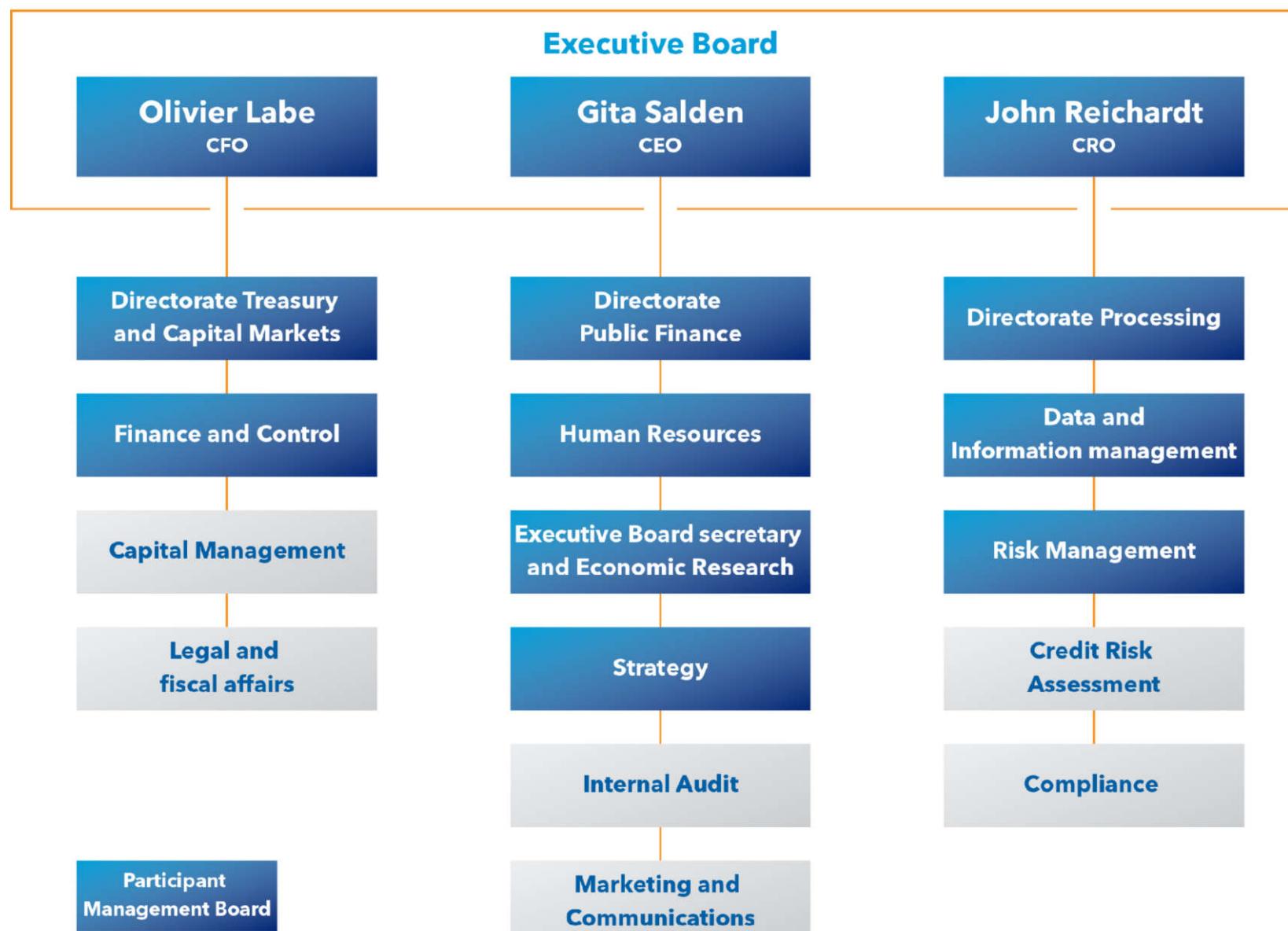
From left to right. Gita Salden, John Reichardt and Olivier Labe.

Name	Sex	Year of birth	Nationality	Date of initial appointment	Date of last reappointment
Gita Salden	F	1968	NL	1 January 2018	--
Olivier Labe	M	1969	F/NL	1 May 2015	1 May 2019
John Reichardt	M	1958	NL	15 October 2008	15 October 2016

Management Board

In addition to the Executive Board members, there are nine senior managers on the Management Board. The Executive Board members have formal authority to make decisions and the remaining members may give an advisory opinion. The Management Board focuses on defining and adopting the organisational policy within the framework of the company's strategy and strategic objective, defining and adopting as well as monitoring the commercial policy within the restrictions imposed by capital allocation in connection with solvency limits, and managing the general course of affairs and projects. The Dutch name for the 'Personelszaken' department was changed to 'HR' in 2019 and, with effect from 1 October 2019, a head of Strategy was appointed who sits on the Management Board. The following organisation chart shows the structure of the organisation and indicates the Management Board members. There are also Executive Board committees that advise and assist the Executive Board in its tasks. A description of the tasks and members of these committees is published on our [website](#).

Organisation chart



Management cycle

The Executive Board is responsible for strategy, company objectives, content and implementation of policy. The directors and department heads that report directly to the Executive Board are responsible for achieving the objectives in accordance with the policy frameworks and for measuring performance. The Executive Board monitors policy implementation and the achievement of objectives on the basis of monthly or quarterly reports prepared by the directors, department heads and the control functions. Where necessary, adjustments are made on the basis of progress against the objectives. The performance in relation to the objectives is reported externally in the annual report. In turn, the Executive Board and senior management evaluate policy as well as the objectives set in preparation for the annual management cycle. The lessons drawn from the evaluation are incorporated into the following management cycle and reported to the Supervisory Board. New policy and procedures are assessed in terms of coherence with existing policy and procedures, and implemented by means of work meetings and publication on the intranet. The policies, procedures and support systems of BNG Bank and its subsidiaries are subject to internal audits.

3.3 Employees

Culture

We launched a culture programme in 2018. The culture we stand for is as follows:

- We work reliably, expertly and jointly on BNG Bank's mission.
- We anticipate and respond to developments in the market and at clients.
- We respect each other's work.
- We are results-oriented and agile and we focus on achieving measurable results while complying with timelines and agreements.
- We are accountable for our responsibilities, conduct and results and we continue to develop ourselves.

Theme groups have formulated various improvement actions and initiatives in four areas (innovation, performance orientation, cooperation and accountability), such as the 'Week-up', in which a member of the Executive Board discusses the key events of that week. Other initiatives include the 'visit your colleague' programme, lunches with feedback from new employees and a suggestions box for innovations. The results of the second culture assessment, carried out in October 2019, show that we have already made good progress in some areas. We will therefore continue with the Innovation theme group and the Innovation Committee to which it gave rise and we will seek to pursue the other three themes in depth in 2020.

Employee satisfaction survey

An employee satisfaction survey was conducted in the second quarter of 2019. A total of 83.7% of all employees took part in this survey. Employees take pride in the social engagement and stability of the bank, as well as in the professionalism with which the bank operates. The workload and social safety are experienced as good and employees enjoy their work. Employees are also satisfied with the possibility of acquiring new knowledge and the appreciation shown for employees. At the same time, the career opportunities within the bank are viewed as a point for improvement. In addition, the rationale underlying the choices made by the bank is not always considered to be clear and there appear to be major differences in leadership styles. The results of the survey were discussed within all teams and provided a basis for formulating improvement plans at the team level.

Employees take pride in the social engagement and stability of BNG Bank.

Active career development policy

Based on the employee satisfaction survey, career development opportunities and mobility have been marked as points for improvement. In addition, we want to ensure that the bank becomes and remains future-oriented and agile. We have accordingly designated an active career development policy as one of the spearheads in our HR strategy. Our career development policy is aimed at strengthening personal as well as organisational agility so as to future-proof our workforce and our organisation. All employees are subject to regular performance and career development assessments at least once a year. We plan for employees to remain in the same job for at least three years and at most seven years.

Employees' agility is increased by taking training courses, through internships and by actively promoting switching to a different area of work, a different department or team or other activities within a team. We support this with instruments such as external coaches, development scans, internal and external internships, training programmes and courses. In 2019, 16 employees changed jobs, an increase of 60%, and 8 employees took up opportunities for internal or external internships. We launched a management development programme for managers and prospective managers in 2019. Investing in managers and prospective managers ensures our management potential for the future.

Training and education

We believe it is important to invest in employees to promote long-term employability. Ample training and mobility budgets are offered for all employees, which can be used by everyone, and coaching and vitality leave can be used for working on your own employability and vitality. Employees who are about to retire can follow the 'Pension into View' course. Employees whose employment contract is terminated can receive coaching and outplacement guidance. A total of EUR 707.675 was spent on training courses (EUR 2,255 per employee) in 2019.

In 2018, we started an internal knowledge programme, which was repeated in 2019. The key elements of bank processes, such as the credit process, payment transactions, risk management and data management, are explained to new employees by employees of the bank in this knowledge programme. There is also a deep dive programme to supplement this, which focuses on bank-specific topics and themes such as hedge accounting, capital policy and the standard pricing model. In the overview below, all in-company training courses given in 2019 are included.

The **career development policy** is targeted at **boosting agility** to **future-proof** our **workforce** and **organisation**.

In-company training courses 2019

Management Development	'Dialog' for managers	Total number of participants:
Certified Scrum Product Owner (CSPO)	ESMA (Mifid II)	356
Advanced Banking Course	Knowledge program BNG Bank, basic modules	Average number of in-company training per employee:
CDD course	Knowledge program BNG Bank, deep dives	6.4 hours
Yellow belt course	Heat networks	Total training hours:
Absenteeism course	Visual communication course	2,266 hours

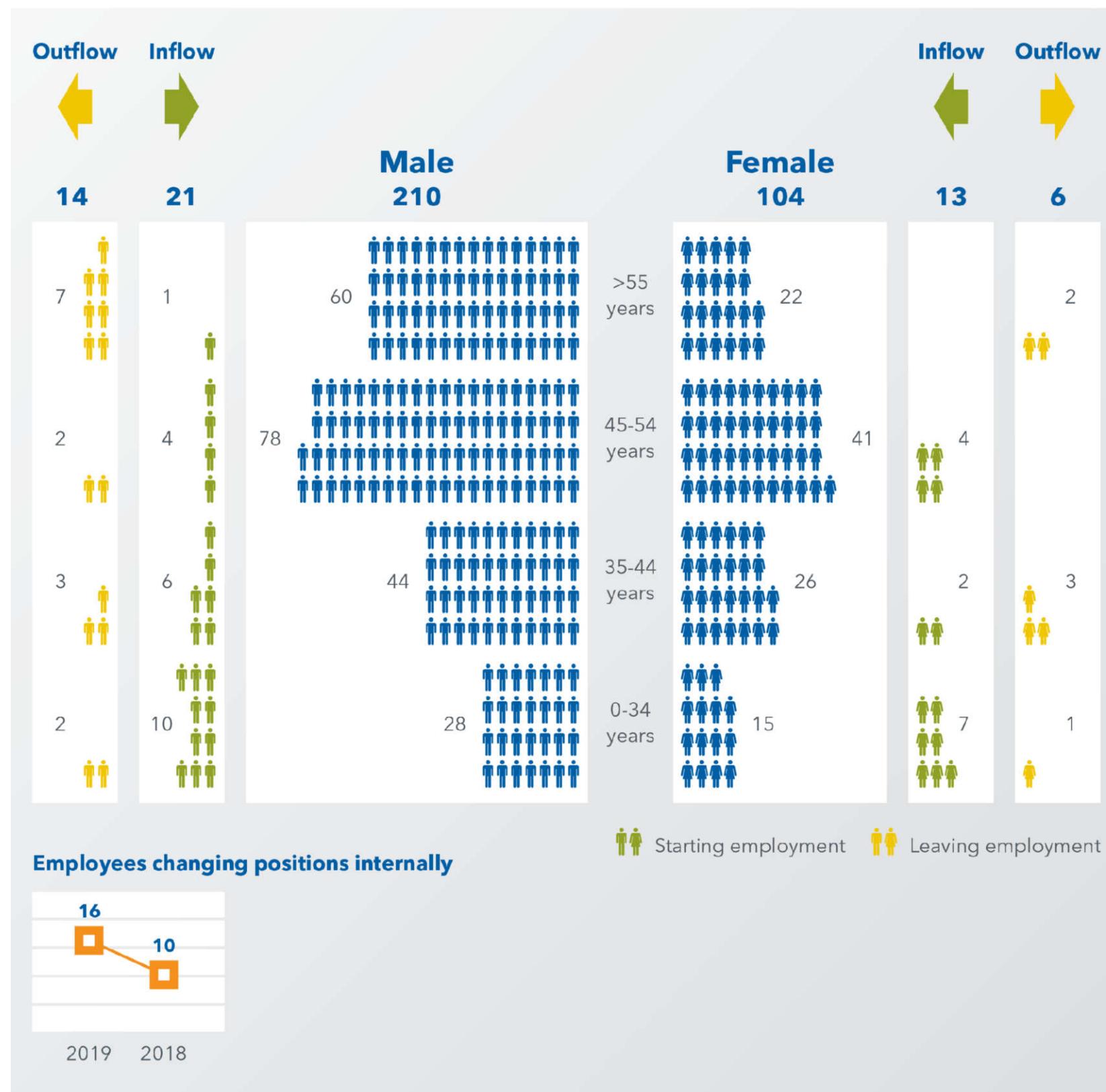
Workforce¹

In 2019, our workforce (BNG Bank and subsidiaries) increased by 8 employees (2.6%) to 314 employees (309.1 FTEs). A total of 46 employees (15%) have permanent contracts.

57 employees (18%) work part time. This concerns 14 men (7%) and 43 women (41%). A total of 16 employees changed jobs internally, an increase of 60% compared with 2018. At 47 years, the average age of the workforce remained virtually unchanged relative to last year. The average length of service of the workforce decreased slightly, to 13.8 years. We also have 17 (16 FTEs) external employees occupying formal staff positions and 55 external employees who do not occupy such positions. All employees work at the office in The Hague. BNG Bank has 304 employees. The subsidiary BNG Gebiedsontwikkeling has 10 employees. The subsidiary Hypotheekfonds voor Overheidspersoneel has no employees.

¹ Figures as at year-end 2019.

Workforce BNG Bank



Parental leave is regulated in the Collective Labour Agreement for the Banking Industry. 13 men and 8 women made use of the parental leave scheme. All employees whose parental leave ended returned to their jobs. Of all BNG Bank employees, 96% are covered by the Collective Labour Agreement for the Banking Industry. Management Board participants (see the [Organisation and management](#) section) and the Executive Board members (12 employees) are not covered by that CLA. All employees participate in the pension scheme. BNG Bank, as the employer, contributes 17.43% to the pension, employees contribute 7.47%. The standard notice period laid down in the Collective Labour Agreement for the Banking Industry is two months.

Diversity policy

We stimulate the recruitment, retention and utilisation of diverse talent and recognise its added value. We aim to be an organisation that offers a working environment in which people feel welcome, can be themselves and are valued for who they are. An optimal team will consist of a mix of men and women, of different ages and of different backgrounds in terms of ethnicity as well as education, training and competences.

A number of internal and external employees with an occupational disability and/or who are partially unfit for work are working at the bank and we will undertake efforts to make it possible for more people at a distance from the labour market to come work for us. We have also entered into an agreement with an organisation that acts as an intermediary in placing people at a distance from the labour market in organisations.

Male/female	Supervisory Board	Executive Board	Managers	Employees
Male	57%	67%	74%	67%
Female	43%	33%	26%	33%

No reports of discriminatory incidents were received in 2019. The procedure for reporting incidents is set out in the regulations concerning [Inappropriate behaviour](#). Furthermore, employees can make use of internal and external confidential counsellors.

Absenteeism

Our working conditions policy is focused on maintaining a healthy working environment for our employees and preventing sickness absence. Nonetheless, sickness absence in 2019 was at 3.6% (2018: 3.3%) for BNG Bank and 0.5% for BNG Gebiedsontwikkeling. The sickness absenteeism rate for BNG Bank is therefore above the internal target of 3.0% and above the average for the financial services sector. The rising trend of 2018 continued in 2019 and this led to a detailed analysis of sickness absence and a revised approach to prevention. The analysis showed that the sickness absenteeism rate is largely attributable to a small number of long-term absent employees, usually involving a medical cause. The managers as well as HR and the Occupational Health and Safety Service have a clear picture of the employees concerned.

Since 2019, the marker for frequent absence has been set at 3 or more times sick during the last 12 months instead of more than 4 times a year, to aid timely detection. In case of frequent absences employees are called up for a talk with the manager. Additionally, a Social Medical Team (SMT) meeting is held twice a year for each manager, in which, besides the manager concerned, the company medical officer, a staff welfare officer and Human Resources are represented. Possible early warning signals for potential sickness absenteeism are discussed in the SMT. This allows the manager to engage in talks with the employee in good time to discuss what is necessary to prevent absence due to sickness. Managers are offered (extra) training in holding absenteeism interviews.

An occupational health and safety management system, based on the Working Conditions Act (Arbowet), is in place at BNG Bank. All internal and external employees are covered by this system. More information on this management system is provided on the [website](#).

3.4 Remuneration policy

We aim for a restrained remuneration policy in line with our identity and strategy. The Supervisory Board monitors the remuneration policy. The general principles of the remuneration policy for the Executive Board and the employees have been approved by the Supervisory Board. Each year, the implementation of the remuneration policy is reported to the Supervisory Board and the Supervisory Board assesses whether the policy meets the principles for a restrained remuneration policy. The General Meeting of Shareholders approves the remuneration policy of Executive Board members and the remuneration policy for the Supervisory Board.

In 2019, the remuneration for the members of the Supervisory Board increased by 2.5% as a result of the increase under the collective labour agreement on 1 January 2019. In 2019, the salary of the highest-earning member of the Executive Board was 4.0 times the median of the salary of employees of BNG Bank (4.8 in 2018). The average salary (wage costs) increased by 0.5% compared with 2018. BNG Bank makes no distinction by gender in its remuneration. The profit-sharing scheme for employees was discontinued with effect from 31 December 2019, with the approval of the Works Council. Therefore, no profit share will be paid to employees in 2020. Instead, employees will receive a compensatory measure. Executive Board members do not receive variable remuneration.

The remuneration policy and the remuneration report are published on the [website](#). The remuneration of the Executive Board and the Supervisory Board in 2019 is reported on in the Annual Accounts.

3.5 Compliance

Laws and regulations

As a bank, we are faced with ever more laws and regulations that are increasingly of a complex nature. The risk of inadequate compliance has grown as a result and requires tighter control. The Compliance Management Framework (CMF), introduced within the bank in 2019, with which the impact and required preparation of upcoming changes to legislation and regulations are mapped, improves this control as well as the capability to demonstrate compliance with laws and regulations. The CMF consists of policy, work procedures, roles and responsibilities to ensure proper compliance with the applicable laws and regulations, as a result of which the risk of financial losses or reputational loss due to inadequate compliance is reduced and becomes manageable.

The Benchmarks Regulation, the European regulation for benchmark rates, was a major development in 2019 in the area of laws and regulations. The implementation of the Benchmarks Regulation meant that an EONIA was issued for the last time on 30 September 2019. The €STR (Euro Short Term Rate) , which will gradually but completely replace the EONIA in the years ahead, has been applied as of that date. EONIA, the interest rate that is used for cash collateral for derivatives transactions and hence determines the value of those derivatives, will continue to exist for another two years as a derivative of €STR.

Ethical business practices

Ethical business practices are an important foundation of our bank. Ethical standards of behaviour on the part of its Executive Board members and employees, as well as providing fair products and services, are a key element in this regard. We apply internal policy rules and code of conduct to safeguard this foundation and to ensure compliance with relevant laws and regulations. Among other things, they provide for the monitoring of employees' private investment transactions, avoiding and where necessary transparently managing conflicting interests and shielding confidential information. Full attention is also given to maintaining and raising awareness of regulations, compliance procedures, and anti-fraud and corruption measures, for example. We have also drawn up procedures for accepting new clients, monitoring existing clients and prevention of financial economic crime.

All new employees receive the [BNG Bank Company Code](#), which is closely related to integrity. All internal employees, as well as the external employees required

Ethical business practices are an **important foundation** of our bank.

to do so, have taken the Dutch bankers' oath. The duty of care, acting in the customer's interests, has priority in the bank's services. Accordingly, we aim to provide straightforward and transparent products that meet the needs of our clients and have manageable risks attached. Considerable attention is given to providing customers with clear and concise information and warning them of the risks attached to certain products. Details of the complaints handling procedure are available on our [website](#).

We continue to estimate the risk of corruption as low. The 'Anti-Corruption and Conflicts of Interest Policy' was approved by the Executive Board in 2018 and published on the intranet, where it can be accessed by every employee. Various regulations mentioned in that policy such as the [BNG Company Code](#), the [Regulations Governing Private Investment Transactions](#), [rules for gifts from business relations and private transactions with suppliers](#) and [rules for employees holding additional positions](#) are published on our website and are therefore accessible to all business partners. The CDD policy also focuses on preventing involvement in corruption. The Systematic Integrity Risk Analysis (SIRA) for BNG Bank and its subsidiaries was updated in 2019.

No significant compliance and integrity-related incidents occurred in 2019. We were not involved in any legal proceedings or sanctions related to non-compliance with laws and regulations in the field of financial supervision, corruption, human rights, environment, competition, product liability or privacy, or anti-competitive measures to which we were party, directly or indirectly. However, a data breach was reported to the Dutch Data Protection Authority in 2019, due to a breach of the confidentiality of personal data. Several documents containing personal data were accessible to employees, even though there was no need for such access.

Supply chain management

Investors on international money and capital markets provide our inbound funding flow with which we can serve our outbound flow, i.e. providing financing to our clients in the Dutch public sector. We raise short and long-term funding in various currencies on international money and capital markets. More information on our funding is provided in the [Funding](#) section. Bonds are tradable on the stock exchange and, accordingly, we have no influence over their ownership. We cover part of our short-term funding requirement by accepting deposits (predominantly from central banks) and by carrying out transactions with financial institutions. These counter parties are subject to the CDD policy, based on the ethical business practices requirement imposed by the Dutch Financial Supervision Act (Wft), the Dutch anti-money laundering legislation (Wwft) and the Dutch Banking Sector Agreement on international responsible business conduct regarding human rights'. There were no changes of note in the chain within which we operate in 2019.

We strive for sustainable purchasing. Our purchasing is geared to actual use and a good balance between environmental, human and economic interests. We use a limited number of suppliers. Suppliers who can submit an ISO14001 or EMAS certificate are preferred when delivering products. For service providers, parties with a demonstrable policy in the field of social return are preferred. This is laid down in our [procurement policy](#). The execution of the payment transactions for our clients and the internal office automation are performed by Centric FSS, the main party with which we cooperate. Our clients are primarily in the Dutch

public sector: local authorities and institutions in the areas of housing, healthcare, education, energy and infrastructure. We expect our customers to comply with the laws and regulations applicable to them. The same also applies to the business partners that they work with in order to carry out their own activities.

The way in which we respect human rights in the chain is set out in our [human rights policy](#). Various manifestations of human rights violations are included in the policy as exclusion criteria. We want to prevent human rights violations occur at our customers and that the bank is associated with such violations. A number of sectors have been designated to which we do not provide services. Those sectors are laid down in our [sustainability policy](#). We apply the [Equator Principles](#) as of 2020 as a basis for monitoring and accountability for project financing.

3.6 Risk management

The process of accepting and controlling risks is inherent to the day-to-day operations of any bank. In order to conduct its operations, a bank must accept a certain level of credit, market, liquidity, operational and strategic risk. Full disclosures on risk management practices are included in the separate Pillar 3 report which is published on our website together with this annual report.

Risk management strategy

Our risk management strategy is aimed at maintaining its safe risk profile, which is expressed in high external credit ratings. Our strict capitalisation policy, the restriction on services and counterparties as laid down in its Articles of Association and the fact that we have no trading book, determine the scope, size and sphere of our risk appetite.

Risk management framework

The Internal Governance Framework (IGF) provides an overview of the internal governance organisation that forms the foundation for all decision-taking activities within the bank. In relation to risk management, the IGF describes how risk management is organised in the 'Three Lines of Defence' (3LoD) model and how decisions on risk topics are structured in the [Risk Management Charter](#). The Risk Management Framework (RMF) is an important component within the IGF and it consists of the following overarching framework documents and policies on general and specific risk related topics: risk governance, risk appetite statement and risk definitions.

The RMF is characterised by its specific business profile that has a strong interconnectedness with the Dutch Public Sector, a low default credit risk profile as a consequence and a relatively large balance sheet. Our continuous risk management process includes the following key steps: identify, assess, measure, monitor, report and steer the various types of risk.

Risk governance

Risk management activities are integrated in all parts of the organisation where key risks are being considered. The bank has adopted a two-tier governance structure consisting of a Supervisory Board and an Executive Board. The Supervisory Board approves the Risk Appetite Statement and monitors whether the actual risk profile of the bank is within the approved risk appetite. The Executive Board is responsible for formulating the

The process of **accepting and controlling risks** is **inherent** to the **day-to-day operations** of any bank.

Risk Appetite Statement and navigating the bank's activities within its risk appetite through its committees, which manage the various risks at operational level.

The following departments in particular are important in supporting the Executive Board and the committees in the implementation of risk policies:

The Risk Management department qualifies, quantifies and monitors risks, and reports to the responsible committees. These risks consist of credit risk, market risk, liquidity risk, operational risk and strategic risk. The department maintains the risk policy documents and the Risk Management Framework. Risk Management participates in the internal [risk committees](#) as well as in the [Risk Committee](#) of the Supervisory Board.

The Credit Risk Assessment department provides independent assessments of and advice on risks in relation to credit and reviews proposals for clients and financial counterparties. The department also participates in the formulation of policies with respect to credit risk. As part of the operational lending process, the department is represented in the [Credit Committee, the Financial Counterparties Committee and the Investment Committee](#). This department is also responsible for the Restructuring and Recovery Management activities – being the supervision, management and processing of non-performing loans and advances as well as other exposures in the loan portfolio where a strong increase of credit risk is perceived.

Where necessary, the Compliance department is engaged in issues in connection with conduct and integrity. The duties, position and authorities of this compliance function are laid down in the [Compliance Charter](#). The Compliance Officer reports to the Executive Board and has a reporting line to the Supervisory Board.

Security provides support to the Management Board and line management in order to safeguard the reliability and continuity of the business processes as well as to be in control of security risks. Security is involved in projects from a security perspective. The Security Officer is positioned in the Processing directorate, with a direct reporting line to the CRO as well as the Management Board in order to safeguard its second line function.

The Internal Audit Department (IAD) periodically conducts operational audits in order to evaluate the structure and performance of the risk management systems as well as to assess compliance with the applicable legislation. The duties, position and authorities of this compliance function are laid down in the [Internal Audit Charter](#). The IAD functions as an independent entity within the bank and reports to the Executive Board. The IAD also has a reporting line to the Supervisory Board.

Risk appetite

The Risk Appetite Framework (RAF) is an important part of the RMF. This framework covers policies, processes, controls, and systems through which risk appetite is established, communicated and monitored. In addition, it includes a Risk Appetite Statement (RAS), risk limits, and an outline of the roles and responsibilities of those overseeing the implementation and monitoring of the RAF. This framework considers material risks as well as to the reputation among stakeholders. The RAF is in line with our strategic objectives, being a relevant player

in the financing of Dutch local authorities as well as in the housing, healthcare, education, energy and infrastructure sectors and delivering a reasonable return for shareholders. The RAF is also used to assess whether the strategic preconditions are met: an excellent risk profile and an efficient organization.

We recognise both financial risks in the form of credit risk, market risk and liquidity risk, as well as non-financial risks in the form of operational risk and strategic risk. In addition, several components are defined that represent the financial health of our operations which are being considered in the development of the risk appetite. The components concerns profitability, solvency and liquidity. In addition, we have included reputation and brand as we have always placed great value on an impeccable reputation.

Risk Appetite Statement

Component	Profitability	Solvability	Liquidity	Reputation & brand
Ambition	- Relatively stable annual results. - Reasonable returns.	- Very prudent capital adequacy, in line with desired rating profile	- Stable presence for public sector. - Prudent liquidity position, in line with desired rating profile.	- Perception of BNG Bank as a semi-public institution with excellent creditworthiness and an outstanding reputation/integrity. - Specialist bank for the public sector with high niche expertise. - Reliable, sustainable, professional. - Customised services at competitive rates.
Qualitative description of risk appetite	- Income and expense trends are relatively stable and in line with each other. - Amounts of potential / incidental losses limited.	- Sufficient capital under Pillar 2. - Total capital ratio significantly higher than other banks. - High quality of capital. - Leverage ratio and MREL compliant with supervisor's criteria.	- Always be able to meet obligations in near term. - Continual access to money and capital markets. - The capacity to generate liquidity is sufficient for any time horizon under stressed circumstances. - Refinancing risk is limited adequately.	- Preserve status of promotional bank. - Employees, management and related parties satisfy integrity profile of BNG Bank. - Prudent service provision and duty of care for clients. - Compliant with laws and regulations and supervisors' criteria. - Capacity to execute the business plan. - Effective, efficient, controlled and ethical business practices.

The Risk Appetite Statement is updated on an annual basis based on external and internal developments. It is subsequently cascaded into limits, targets and ratios for the various types of risks. These are subject to a monitoring programme to determine each quarter whether we are within the limits of its risk appetite. The outcomes are reported to the Management Board and Supervisory Board as part of the quarterly Risk Report. The Risk Report provides aggregated information derived from figures that are used for daily limit monitoring. As a

result, the information conveyed to the Management Board and the Supervisory Board is in line with the information used in the operational processes.

In 2019, we continued to operate within its risk appetite and there were no major limit breaches. With regard to capital, we satisfied legally binding supervisory requirements as well as additional internal capital targets. With regard to operational risk, we remained within the internal norms for operational incidents. For strategic risk, we increased focus on strategic planning and execution in the fields of digitisation, disintermediation and sourcing.

Compliance Management Framework

For a bank to keep its 'license to operate' it is of utmost importance to have a solid and trustworthy reputation. Applicable laws and regulations have increased by number and are more often of a complex nature. Furthermore, the requirement of a demonstrable compliance has grown of importance. Therefore an effective and efficient framework is needed to manage future and current compliance risks. The Compliance Management Framework (CMF) is another important internal control related framework within the Internal Governance Framework (IGF). The CMF aligns to the main principles of the RMF that include risk categories and definitions, risk appetite and the risk management cycle.

Compliance with applicable laws and regulations is classified into four main categories, as follows:

- Prudential - regulations that relate to the solidity of the bank in order to safeguard the financial stability;
- Financial markets - regulations that focus on financial markets processes, relations between market parties and services to clients;
- Other - regulations that are not part of the prudential or financial markets category;
- Integrity - regulations that focus on integrity related topics.

Adequate execution of the CMF ensures that the compliance risk is in control which contributes to controlling reputational risk. In addition, the CMF generates early alerts with information on regulatory changes relevant for assessing potential impact on, for example, strategy, commercial activities and asset and liability management.

Risk culture

We are convinced of the importance of a proper risk culture within our organisation and endeavours to embed it in the internal control and risk management system. This is realised amongst others by means of applying the 3LoD model to the risk management cycle.

The risk appetite is an important instrument in stimulating risk awareness and driving the desired risk behaviour. Also the RMF and relating documents contribute to the knowledge, cooperation and execution of adequate risk management throughout the organisation.

We are convinced of the **importance**
of a **proper risk culture** within
our organisation.

Risks

Credit risk

Credit risk is the risk of losses in earnings or capital resulting from the potential risk that a borrower or a counterparty will fail to meet its obligations in accordance with agreed terms. It includes counterparty risk, settlement risk and concentration risk.

In the course of 2019, all the Probability of Default (PD) models were validated by an external party. We continuously enhance our PD models in line with the relevant rules and regulations. Due to low credit risk, the credit risk assessment framework for zero-risk-weighted lending is limited. This framework was extended in 2019. In order to comply with current and future regulations as well as meeting supervisory expectations, further extensions will be necessary.

Brexit is expected to have a limited impact on our business model. On the asset side, our exposures are limited to a small number of public-sector exposures of investment-grade quality. In addition, we do not provide any material cross-border services in the United Kingdom. However, the business volume with financial counterparties is substantial, given our policy to hedge market risks on both sides of the balance sheet with derivatives. We are prepared for a hard Brexit by onboarding European entities, for both its hedging and clearing activities.

In the second quarter of 2019, we took a provision. The situation at the client was stabilised in the third quarter and we are currently working on further risk mitigation. In addition, in the last weeks of 2019 it became clear that a client was in financial distress due to a near bankruptcy of her main counterparty. As a result, we took impairments for these cases.

Market risk

Market risk is defined as an existing or future threat to the capital and earnings as a result of market price fluctuations. There are several forms of market risk that we consider: interest rate risk, foreign exchange risk, volatility risk and spread risk.

In the course of 2019, the interest rate position gradually moved towards the long-term benchmark. Also, the bandwidth of maximum allowed interest rate positions around this benchmark was lowered. As a result of an expected rise in interest rates, the interest rate position, measured in basis point sensitivity, was still lower than the long-term benchmark applied throughout the year.

In 2019, we made extensive preparations for the Inter Bank Offer Rate (IBOR) transition. The transition progressed according to plan. In 2020, the transition from EONIA to €STR is scheduled to take place which will be a challenge that requires significant efforts.

Another development in 2019 was the development and implementation of a new statistical methodology to quantify the parameters in the ICAAP stress test as input for calculating the spread risk. Compared to the previous methodology that was mainly based on qualitative input, the new quantitative approach is more objective. This methodology was also implemented and integrated into the Asset & Liability Committee reporting, one of the Executive Board committees, and monitoring as part of the quarterly risk report.

Liquidity and funding risk

Liquidity risk is defined as the existing or future threat to the institution's capital and earnings due to the possibility that it will not be able at any moment to fulfil its payment obligations without incurring any unacceptable costs or losses. Short-term liquidity risk is the risk that the bank will not be able to attract sufficient funds to meet its payment obligations. Long-term liquidity risk (or refinancing risk) is the risk that the bank will not be able to attract any (or sufficient) funds against funding spreads that would not jeopardise its continuity.

In 2019, the ECB maintained policy interest rates at historically low levels and continued net asset purchase from November 1st. During 2019, there were also numerous economic and political factors that influenced financial markets, such as Brexit and the escalation of international trade tensions. Despite these developments, funding conditions for us remained favourable during 2019. We were able to operate effectively both on the capital markets and on the money markets.

The long-term funding volume target as set in the funding plan has been increased from EUR 17 billion to EUR 18 billion in the second half of 2019. This was due to a higher than expected asset production and an increased level of cash collateral as a consequence of the extreme low interest rates environment. Moreover, as the maturity of new assets was longer than planned, the Asset & Liability Committee, one of the Executive Board committees, decided to increase the long-term funding maturity accordingly. The bulk of the short-term funding needs were addressed by the ECP and USCP programmes. In addition, repo funding also played a significant part in short-term funding in 2019.

As part of a multi-year data project, all data regarding liquidity risk was technically redesigned and is part of the central data warehouse. Key milestones for 2019 regarding reporting based on this new data warehouse were met and the project will be completed in the course of 2020. In Q4 2019, an external review of the liquidity risk framework was performed and the key recommendations from this exercise will be assessed in 2020. Furthermore, we participated in the EBA Liquidity Stress Test in 2019 and no recommendations for further improvements were reported by the ECB. This means, among other things, that our liquidity buffers can be considered sufficient.

Operational risk

Operational risk is defined as the risk of losses to earnings and capital due to the shortcomings of internal processes, people and systems, or as a result of external events. The operational risk comprises of the following risks: process risk, people risk, ICT risk, data quality risk, outsourcing risk, compliance risk, legal risk and external event risk.

The business departments, being the risk owners, as first line of defence, have to strengthen their own risk monitoring by setting up explicit monitoring programmes. This will take effect in 2020.

Data quality continues to be important. Information based on data is used for business decisions. By the end of 2020 the company-wide data warehouse will contain all business data, necessary to meet both internal information needs and external requirements. We are

striving for compliance with the Principles for Effective Risk Data Aggregation and Risk Reporting (PERDARR).

New legislation has resulted in a revised policy for Customer Due Diligence. Additional, external staff is deployed to support the necessary investigations. The process is supported by tooling and external client information.

On ICT applications we prefer, if available, to purchase a suitable external solution over in-house development of tailored solutions. Moreover, the ICT environment is gradually moving from a situation whereby applications are running almost exclusively 'on-premises' to an environment where selected applications are running on a virtual cloud platform. A thorough risk analysis was conducted before data can be entrusted to a third party service provider. A cloud service is only considered for acceptance if the service provider can provide appropriate assurance on Confidentiality, Integrity and Availability.

In 2019, the new customer portal My BNG Bank went live. This portal is a custom solution which runs on a cloud platform. The security risk as well as other operational risks are thoroughly assessed and mitigated before introduction. Following a successful pilot all customers are now being onboarded.

Centric is a key partner for our 'on premises' ICT. Multiple changes within a short period of time in the senior management of Centric have raised concerns, but the services provided are in line with the agreed service level.

As a small bank in terms of number of employees, we are vulnerable with respect to staffing. Apart from the daily business, ICT projects and other changes must be implemented. Furthermore, broad employability and mobility of staff is promoted to improve organisational agility.

Strategic risk

Strategic risk is defined as the risk that strategic decisions of the institution itself could result in losses and/or the chance of losses as a result of changes beyond the control of the institution or group in the area of the competitive position, the political climate, regulatory developments, reputation and business climate. In addition to general strategic risks, the following aspects can be identified: reputational risk, political risk, regulatory risk, sustainability risk and business climate.

Strategic risks are driven by the external environment, which is evolving continuously. In meetings with stakeholders, these developments are discussed and evaluated. Key strategic risks identified are the interconnectedness risks of disintermediation, platform developments and digitisation. To ensure completion of the strategic objectives, we have appointed a Head of Strategy to further structure and drive its strategic planning and execution process.

The Dutch Energy transition, deeper integration of the euro area banking system and platforms created by technology firms or financial competitors are key trends that we consider to have an impact on its business model. We have assessed our business model and concluded that there is no necessity to be a technological frontrunner. Although pricing

and availability of services are key competitive advantages, in the current digital era, we cannot afford our digital service offering to become a client dissatisfier. Therefore, we have started in 2019 to build a digital foundation that will allow us to extend its digital services over time. These services will initially be made available to the public sector entities. This platform creates opportunities for us to expand its digital offering in the future.

As an organisation with a sizeable balance sheet but a small scale of operations, changing client demands as well as increasing regulatory pressure force us to move from a stable organisation to an organisation that is both stable and capable to adapt to continuous change in its business environment. The quality of several processes is improved and the documentation of the corresponding governance is being improved. These developments have an impact on sourcing decisions and corresponding staff requirements. In 2019, instruments to create incentives for job rotation, internships and task rotation within or between departments were enhanced. Executing the strategic Human Resources Policy became more prominent on the agenda in 2019. Inflow, outflow and through flow are key elements in this policy, next to elements such as diversity and key personnel risk.

3.7 Sustainable operations

In our own operations, we aim to operate on a climate-neutral basis, use materials and energy as efficiently as possible and reduce our CO₂ footprint. To monitor our progress, we report the CO₂ emissions of our own operations each year on the basis of Scope 1, 2 and 3 of the Greenhouse Gas Protocol. The calculation of the CO₂ emissions of internal operations is explained in the [Reporting principles](#) section.

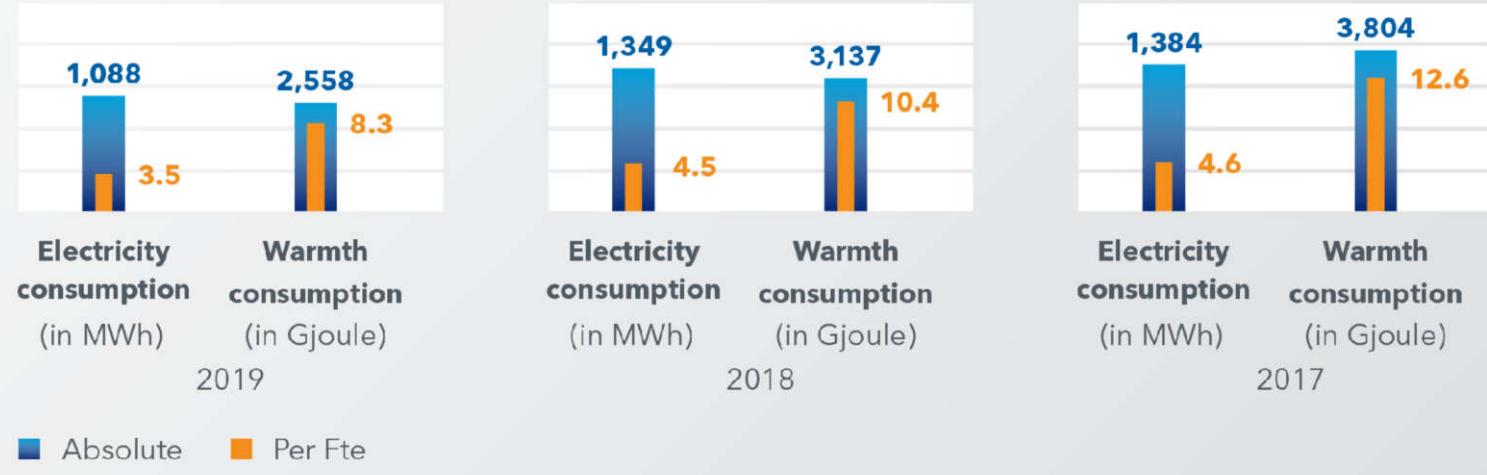
In 2019 our CO₂ emissions were reduced by 17% compared to 2018. In addition, we were able to compensate 211 tonnes out of 377 tonnes through CO₂ compensation measures (56%). Electricity consumption has been reduced by 19% compared to 2018 and heat consumption by 18%.

CO₂ footprint

Emissions



Energy and warmth consumption



3.8 Corporate Governance Statement

The internal risk management and control systems are an important point of attention within BNG Bank. The Risk Governance Framework forms the basis for all risk management activities within BNG Bank. It clarifies the principles behind the internal control and risk management system. The Risk Appetite Statement describes the risks that the bank wishes to accept in order to achieve its objectives. The various risks attendant on the bank's activities are discussed each year in BNG Bank's Annual Report. In their 'In control' statement to the Executive Board, the managing directors and department heads reporting directly to the Executive Board focus on risk management in relation to the bank's risk appetite. They also set out in the Annual Plans how they aim to fulfil their responsibility in meeting the bank's risk appetite. The overall framework is closely linked to the bank's capital management policy, which is periodically reviewed and discussed with the regulator.

Audits by the Internal Audit Department (IAD) focus on independently determining the proper structure and functioning of the internal risk management and control systems. The external auditor audits the financial statements and evaluates internal control in respect of the financial reporting insofar as relevant to an efficient and effective audit of the financial statements. The findings of the IAD and the external auditor are reported in the management letter and the auditor's report, respectively, to the Executive and Supervisory Boards. The Manager of the IAD and the external auditor attend the meeting of the Audit Committee and the Supervisory Board meeting at which the financial statements are discussed.

The Annual Report provides sufficient insight into shortcomings in the operation of BNG Bank's internal risk management and control systems. The aforementioned systems provide a reasonable degree of certainty that the financial reporting contains no inaccuracies of material importance. Of course, these systems are incapable in themselves of providing absolute certainty about the achievement of the company's objectives and the prevention of all errors, instances of fraud and non-compliance with laws and regulations. A detailed explanation is provided in the 'Risk' section of the Annual Accounts. The consolidated financial statements are prepared on the basis of the going-concern principle. No material risks and uncertainties were identified which are relevant to the expectation of continuity for a period of twelve months after the preparation of the report.

Declaration of responsibility

In the opinion of the Executive Board, the financial statements provide a true and fair view of the assets, liabilities, financial position and results of BNG Bank and the subsidiaries included in the consolidation. The Annual Report provides a true and fair view of the position

as at the balance sheet date, performance during the reporting year and the expected developments of BNG Bank and its consolidated subsidiaries whose figures have been included in the consolidated financial statements. The Annual Report also describes the material risks facing BNG Bank.

The Hague, 13 March 2020

Executive Board

Gita Salden, Chair

Olivier Labe

John Reichardt

Report of the Supervisory Board

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4.1 Foreword

Due to a concurrence of various developments, 2019 was a challenging year for the bank. The ECB's monetary policy and the resumption of its buying programme led to very low interest rates, which put pressure on the bank's returns. The continuing uncertainty concerning Brexit compelled the bank to take measures to safeguard the continuity of its operations even in the event of a hard Brexit. Supervision is increasingly developing in the direction of a data-driven approach, which places stringent demands on the quality of the available data. The supervisory pressures remained high, as reflected, for instance, in an intensive on-site inspection focusing on the lending process. The Supervisory Board devoted extensive attention to these developments, which place a heavy burden on the employees of the bank. In this connection, the Supervisory Board considers that, from a supervisory perspective, justified questions are being asked about the lending process, although the bank's core clients remain completely reliable with regard to fulfilling obligations.

The strategic challenges that the bank faces were a topic that, in addition to those mentioned above, featured extensively in the dialogue between the Supervisory Board and the Executive Board. In the Supervisory Board's view, the digitalisation and computerisation of society will inevitably have an effect on the bank's business model, despite the latter's continuing robustness. Disintermediation and the emergence of platforms, as well as changes in payment transactions, cloud developments and the future of outsourcing, are themes that were therefore discussed extensively. The related activities undertaken by the Supervisory Board included a working visit to Centric FSS in late autumn. In this connection, the Supervisory Board firmly welcomes the Executive Board's decision to establish a separate Strategy department that can support the Executive Board in the process of providing focus for these developments. The foundation for this was laid during a strategic dialogue in early 2019 in which all these developments were discussed at length.

On the customer side, the bank outperformed expectations in 2019. The credit requirement and the turnover achieved were higher than expected. To maintain its prized status as 'promotional bank' and further increase the targeted impact in the area of sustainable development, the bank will have to ask itself in the near future which forms of lending are best suited to optimally implementing its mission. The Supervisory Board expects to engage in fruitful dialogue on this with the Executive Board in 2020.

In the **dialogue** between the **Supervisory Board** and the **Executive Board**, the **strategic challenges** the bank faces were addressed in depth.

In closing, the Supervisory Board would like to express its special appreciation for the commitment and involvement demonstrated by all of the bank's employees. We are keenly aware that achieving the mission and the objective of BNG Bank, to be a committed partner for a more sustainable Netherlands and to achieve social objectives at the lowest possible costs, is not possible without them.

On behalf of the Supervisory Board,

Marjanne Sint, Chair of the Supervisory Board
The Hague, 13 March 2020

4.2 Composition of the Supervisory Board and Committees

Composition of the Supervisory Board

The composition of the Supervisory Board in 2019 is shown in the following table. In accordance with the Articles of Association and the Corporate Governance Code, Supervisory Board members are eligible for reappointment for a period of four years in the first General Meeting of Shareholders to be held after a period of four years has elapsed since the first appointment. Supervisory Board members may then, under special circumstances, be reappointed for a two-year term of office, which may be extended for a maximum period of two years thereafter.

Name	Sex	Year of birth	Natio-nality	Date of initial appointment	End of first period	End of second period
Marjanne Sint, Chair	F	1949	NL	20 August 2012		2021
Jan van Rutte, Vice-Chair	M	1950	NL	23 November 2015	2020	
Huub Arendse (from 18 April 2019)	M	1958	NL	18 April 2019		2023
Kees Beuving	M	1951	NL	24 April 2014		2022
Theo Bovens (until 18 April 2019)	M	1959	NL	23 April 2012		2019
Johan Conijn	M	1950	NL	1 January 2016	2020	
Marlies van Elst	F	1966	NL	19 April 2018		2022
Jantine Kriens	F	1954	NL	24 April 2014		2022
Jan Nooitgedagt (until 18 April 2019)	M	1953	NL	23 April 2012		2019

Two vacancies arose on the Supervisory Board in 2019 due to the early retirement of Theo Bovens and Jan Nooitgedagt. In order to achieve the desired reduction of the size of the Supervisory Board, down to seven members, the vacancy left by Theo Bovens was not filled. Jan Nooitgedagt was succeeded by Huub Arendse. As from 18 April 2019, the Supervisory Board accordingly consisted of four men (57%) and three women (43%). By virtue of the appointment, the Supervisory Board continues to have enough members with the required expertise to serve in the Audit Committee and Risk Committee. Following the departure of Jan Nooitgedagt, Jan van Rutte was appointed as Vice-Chair of the Supervisory Board.

Johan Conijn and Jan van Rutte will retire by rotation in 2020 and are eligible for reappointment for a second term. Individual profiles were drawn up for both vacancies in line with the profile drawn up for the Supervisory Board as a whole. The Supervisory Board has concluded that Johan Conijn and Jan van Rutte satisfy the requirements of the profile and are eligible to be nominated for reappointment. Reappointment is not a foregone conclusion, however. The Supervisory Board therefore gave the shareholders an opportunity to recommend persons for the imminent vacancies. No use was made of this opportunity. On the advice of the HR Committee, the Supervisory Board therefore resolved to nominate Johan Conijn and Jan van Rutte for reappointment in the General Meeting of Shareholders in April 2020.

Jantine Kriens will step down from her principal position at the Association of Netherlands Municipalities (VNG) in 2020 due to her retirement. She is prepared to continue to serve as a member of the Supervisory Board of BNG Bank until a successor for her has been found. The HR Committee will prepare a nomination in 2020 with due regard for the succession plan.



From left to right. Huub Arendse, Kees Beuving, Marlies van Elst, Johan Conijn, Jantine Kriens, Jan van Rutte, and Marjanne Sint.

Brief Curriculum Vitae of Supervisory Board members

All Supervisory Board members have ample knowledge of and experience with the relevant business units of BNG Bank, the markets within which the bank operates and the specific characteristics of public stakeholders. The collective knowledge of the Supervisory Board is described in the Supervisory Board's succession plan and in its job profile. The current or most recent principal position held by each member of the Supervisory Board is listed below. Additional positions held by the Supervisory Board members are only shown insofar as they

are additional positions whose number is subject to limitation under the CRD IV regulations. A register containing all the [additional positions](#) held by Supervisory Board members is available on our website. All the Supervisory Board members are independent within the meaning of the relevant best-practice provisions of the Corporate Governance Code.

Marjanne Sint, Chair of the Supervisory Board was formerly Chair of the Executive Board of Isala Clinics in Zwolle. She serves as Chair of the PGGM Supervisory Board and as a Supervisory Board member of Bergman Clinics.

Jan van Rutte, Vice -Chair of the Supervisory Board was formerly Executive Board Chair of Fortis Bank Nederland and CFO in the Executive Board of ABN AMRO Groep. He serves as Chair of the Supervisory Board of Volksbank and as a member of the Supervisory Board of ORMIT and PGGM.

Huub Arendse was CFO and member of the Executive Board of Achmea and a partner at KPMG. He is also the Chair of the Supervisory Board of Achmea Bank.

Kees Beuving was formerly Executive Board Chair of Friesland Bank.

Johan Conijn is Director and senior adviser on housing associations at Finance Ideas. He serves as a member of the Investment Committee of Amvest Residential Core Fund.

Marlies van Elst was COO of ING Bank in Belgium and Poland and a member of the Operations & IT Management Team of ING Group.

Jantine Kriens is Managing Director of the Association of Netherlands Municipalities (VNG).

Composition of the Supervisory Board Committees and attendance

The four Supervisory Board Committees, the Audit Committee, the Risk Committee, the HR Committee and the Remuneration Committee, prepare decision-making by the Supervisory Board. The [Activities Supervisory Board-committees](#) section describes the activities of the committees in further detail.

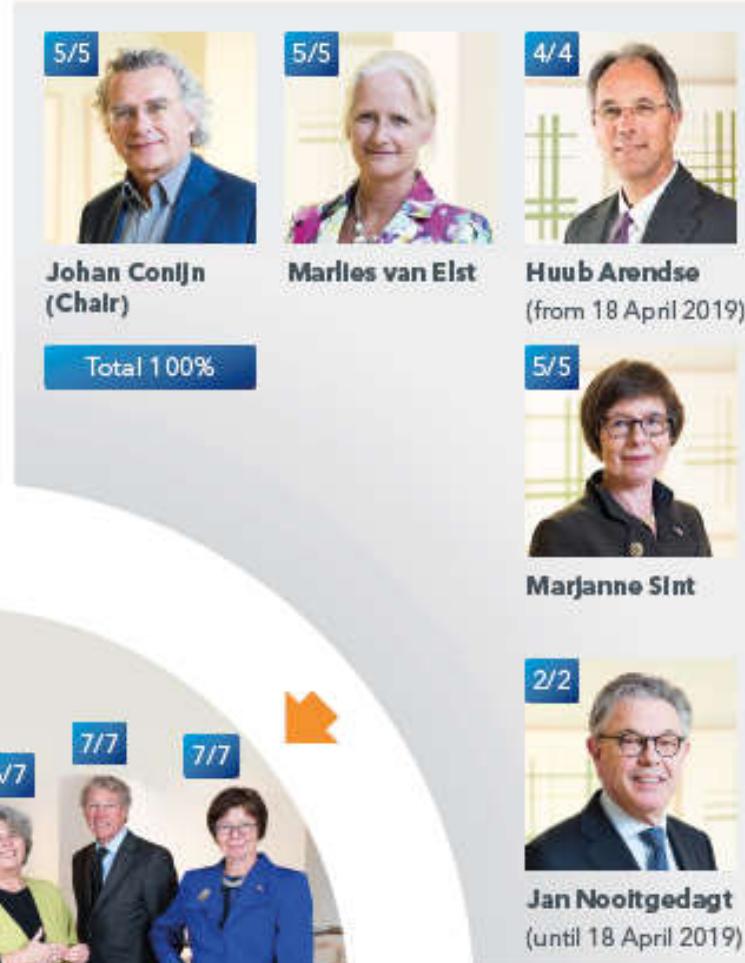
A total of seven Supervisory Board meetings were held in 2019. The attendance rate at the meetings of the Supervisory Board in 2019 was 96% (2018: 84%). In addition, the Audit Committee met four times, the Risk Committee met five times, the HR Committee met four times and the Remuneration Committee met once. The attendance rate at the meetings of the committees in 2019 was 100% (2018: 86%). The attendance rate for all meetings in 2019 was 98% (2018: 84%).

Composition of the Supervisory Board Committees and attendance

Audit Committee



Risk Committee



Supervisory Board

Total 96%

Jan Nootgedagt Theo Bovens
(until 18 April 2019) (until 18 April 2019)



HR Committee



Remuneration Committee



4.3 Activities Supervisory Board

Meetings and subjects discussed

The Supervisory Board monitors the policy of the Executive Board, the way in which the latter implements the strategy and the general course of affairs in the company. To this end, the Supervisory Board also focuses on the effectiveness of the internal risk management and control systems as well as the integrity and quality of the financial reporting. Depending on the subject under discussion, the Supervisory Board plays a role as sparring partner, a supervisory role or an employer role.

The Supervisory Board held seven meetings in 2019. The regular meetings of the Supervisory Board are also attended by Executive Board members and, when invited, the external auditor. A private session, which is only attended by members of the Supervisory Board, is held prior to each Supervisory Board meeting. In the Supervisory Board meetings, a written and oral report is presented of the Committee meetings, which are held one week prior to the regular meetings of the Supervisory Board. Meeting documents of the Committees that are of relevance to the Supervisory Board are also listed on the agenda of the Supervisory Board meetings. Where the approval of the Supervisory Board is required, the Committee concerned gives advice to the Supervisory Board.

The Supervisory Board fully endorses BNG Bank's aim to act as a committed partner for a more sustainable Netherlands by supporting government policy and the public sector in achieving social objectives. In 2019, the Supervisory Board extensively exchanged views with the Executive Board on the wish to boost the coherence and steering role of the bank's strategy process. This led to the decision to establish a separate Strategy department, under the responsibility of the Chair of the Executive Board. The recruited Strategy Manager started work in October 2019. In addition, regular discussions took place with the Executive Board in 2019 on the execution and progress of strategy implementation as well as the principal related risks. The question of how the bank should respond to the external trend of disintermediation and the emergence of platforms was a major topic. The Executive Board arranged for a scenario analysis of the market for public sector loans to be carried out and obtained advice on how to prepare for the possible ways in which the market might evolve. Digitalisation is a key focus area in this connection.

The Supervisory Board has discussed the IT strategy and endorses the choices made by the Executive Board: 'buy

The **Supervisory Board** monitors the policy of the **Executive Board** and the **course of affairs** within the bank.

before make', with a preference for the cloud. In that connection, the outsourcing strategy was also discussed. The Supervisory Board took note of the progress of the long-term Data Insight programme, which is due to be completed in 2020. The programme is designed to provide a shared data foundation in the form of a Data Warehouse (DWH) and a dedicated Data Governance structure. In 2020, all existing reporting systems must be replaced or connected to the DWH that has been put in place. The Supervisory Board took detailed note of the progress of the programme and determined that data quality must become a core steering tool for the organisation to enable it to use the DWH successfully. Safeguarding the quality of the data supplied to the DWH for reports and analyses is a continual focus area. With regard to HR, the Supervisory Board took note of the progress of the HR strategy, particularly the strategic personnel planning, measures to increase mobility and the results of the employee satisfaction survey. In the light of all the external developments, the Supervisory Board considers it to be important that employees, by advancing their own development, also take charge themselves of maintaining or increasing their employability. The Supervisory Board approved both the Executive Board's proposal to discontinue the profit-sharing scheme for employees with effect from 2020 and the proposed compensation.

Lastly, matters arising in connection with external supervision, including the on-site inspection of the credit process and all letters with findings of the regulator, the capital and liquidity planning, the dividend policy, the interest benchmark reforms and the self-evaluation results, were discussed as well.

Permanent education

Supervisory Board and Executive Board members complete a permanent education (PE) programme each year. A total of seven PE sessions were organised in 2019. PE sessions featuring external guest speakers were organised around the theme of Invest-NL and the impact of technology on the bank's strategy. In addition, working visits to Centric FSS and to Trias Westland, a geothermal project financed by the bank, took place in 2019. During the working visit to Centric FSS, the Supervisory Board questioned Centric FSS, as the bank's main IT partner, about its strategy and vision for the development of its own service provision in the area of outsourcing. The Supervisory Board also voiced its concerns about the developments in the management of Centric FSS. The Supervisory Board is following these developments very closely.

Furthermore, three deep dive sessions were organised about the credit assessment of the solvency-free portfolio of the bank, the internal rating models applied by the bank and the Supervisory Review and Evaluation Process (SREP). These sessions provided the Supervisory Board with insight into the manner in which BNG Bank had prepared for these themes and the way in which it dealt with the associated risks.

Evaluation of the Supervisory Board and the Executive Board

In February 2019, the Supervisory Board discussed the outcome of the annual evaluation of the Board. The evaluation, which was conducted internally, consisted of a survey and telephone interviews conducted by the Vice-Chair with each Supervisory Board member. The

During **permanent education** sessions, **current developments** are discussed and **best practices** are shared.

overall picture that emerged from the evaluation is positive. The main conclusion is that the Supervisory Board feels a need to focus more extensively in the plenary Supervisory Board meetings on the developments within the bank's client sectors and their relationship with the bank. The Supervisory Board is also aiming for a greater focus on the continuity and succession planning of the senior management and seeking to further deepen its insight into the interrelations between finance, risk and business.

In 2019, following preparatory work carried out by the HR Committee and discussion in the Supervisory Board, a 360-degree evaluation of the members of the Executive Board was performed. The Supervisory Board had decided to evaluate all members of the Executive Board on the basis of several objectives for the Executive Board as a collective body and on a number of individual objectives with effect from 2018. In the opinion of the Supervisory Board, the evaluation of the Executive Board resulted in a positive outcome.

Contacts with stakeholders

The Supervisory Board maintains contacts with other stakeholders including the Works Council, clients, shareholders, the external regulator, the external auditor and management, as well as other parties. Members of the Supervisory Board attended three consultative meetings with the Works Council in 2019. The Supervisory Board and the Executive Board additionally meet with the Works Council once a year during a joint lunch highlighting certain issues. The Supervisory Board sees the contacts with the Works Council as constructive, and appreciates the transparency and constructive dialogue between the Supervisory Board, the Executive Board and the Works Council.

The Supervisory Board engages with clients during working visits in connection with Permanent Education. The contacts with the shareholders are conducted in part via the General Meeting of Shareholders, in which the Supervisory Board renders account for its supervision. The annual General Meeting of Shareholders was held on 18 April 2019. The items on the agenda concerned the approval of the financial statements, the approval of the proposed dividend, the grant of discharge to each of the Executive Board and Supervisory Board members for their duties during the financial year and the appointment of Huub Arendse as Supervisory Board member. All the items on the agenda requiring approval were approved by the General Meeting of Shareholders. Discussions were also held between the Ministry of Finance, BNG Bank's primary shareholder, and the Chair of the Supervisory Board on a quarterly basis.

The Chairs of the Supervisory Board, the Audit Committee and the Risk Committee each hold annual consultations with the external regulator. Members of the Supervisory Board also keep in touch with managers of BNG Bank. Where relevant, managers attend specific agenda items of the Supervisory Board and the Committees and/or hold presentations. Lastly, the Supervisory Board maintains regular contacts with the external auditor as well as the Internal Audit Department (IAD), and the Supervisory Board oversees the performance of the external auditor.

In the Supervisory Board's opinion, no situations occurred in 2019 that involved conflicting interests on the part of Executive Board members, Supervisory Board members, shareholders and/or the external auditor of material significance to the company and/or the relevant Executive Board members, Supervisory Board members, shareholders and/or the external auditor.

4.4 Activities Supervisory Board-committees

Working method of the committees

The four Supervisory Board committees support the Supervisory Board in monitoring the activities of the Executive Board, prepare decision-making by the Supervisory Board and advise it on a variety of subjects. Each committee has its own [regulations](#). In principle, the committees meet one week before a regular Supervisory Board meeting.

Audit Committee

The Audit Committee fulfils the role of the Supervisory Board in monitoring the activities of the Executive Board and prepares decision-making on financial reports, internal control systems, internal audit and the external auditor. Next to Audit Committee members, its meetings are also attended by the Executive Board members, the Manager Internal Audit Department (IAD), the Manager Finance & Control and the external auditor. The meetings are also always attended by the Chairs of the Supervisory Board and the Risk Committee. The Audit Committee holds a private session with the external auditor and the Manager IAD prior to every regular meeting of the Audit Committee. The Chair of the Audit Committee consults with the Manager IAD twice a year.

The Audit Committee met four times in 2019. The Committee was informed about all quarterly reports with key figures, developments and outlook in relation to clients, profitability, solvency, capital, liquidity and funding. In response, the Committee asked the Executive Board questions about the development of turnover and the portfolio, about the scope offered by the realised return for the bank to serve its customers even better and about the costs. The 2018 financial statements and the Annual Report were also important topics of discussion. Following up on this, the Audit Committee discussed the quality of the results. The Audit Committee gave the Supervisory Board a positive recommendation on the Executive Board's proposal concerning a dividend distribution of 50% for 2018. In the external auditor's report, the Audit Committee received an explanation of the 'key audit matters', namely the impairments of loans and receivables, the system of hedge accounting applied by BNG Bank and the measurement of financial instruments. The Audit Committee agrees with the findings of the auditor. A point of discussion following the 2019 management letter of the Internal Audit Department was the judgement formed by the IAD on transaction monitoring and the implementation of the three lines of defence model, particularly the challenging and monitoring role of the second line. The prioritisation

The **committees** of the Supervisory Board support the Supervisory Board in monitoring the activities of the Executive Board, prepare decision-making and advise the Supervisory Board.

in relation to the delayed completion of an important system implementation was also discussed. Further to the 2019 interim report and the findings of the external auditor, the Audit Committee considered in particular the creditworthiness of several clients and the amount of the provisions recognised.

In addition to the regular subjects mentioned above, the Audit Committee devoted attention in 2019 to the results of a validation, performed externally, of the rating models used by BNG Bank. The Audit Committee received information on the potential impact of future developments on the leverage ratio and questioned the Executive Board about the intended target for the leverage ratio, both at present and in the long term. Additionally, the Audit Committee discussed the trend in the development of the results with the Executive Board and advised it on the formulation of an internal standard for assessing costs. Lastly, in 2019, the periodic discussions of the progress of the implementation of the IAD findings were intensified.

Risk Committee

The Risk Committee supports the Supervisory Board in monitoring the activities of the Executive Board in risk-related matters such as risk policy and risk management, compliance and the risk analysis of the remuneration policy, and prepares the Supervisory Board's decision-making on these matters. Next to Risk Committee members, the Risk Committee meetings are attended by the Executive Board members, the Manager Internal Audit Department (IAD), the Manager Risk Management and the Compliance Officer, when invited. The Chair of the Risk Committee consults with the Manager Risk Management twice a year and with the Compliance Officer once a year.

The Risk Committee met five times in the year under review. At regular intervals, the Risk Committee discusses the effectiveness of the structure and functioning of the internal risk management and control systems, as well as the material controls aimed at controlling strategic, operational, compliance and reporting risks. The Committee receives a quarterly Risk Report, in which the Risk Management department reports on the monitoring of the Risk Appetite approved by the Supervisory Board. The reports discuss the development of the bank's credit, market, liquidity and operational risks, including cyber risk and non-financial risks. Partly on the request of the Risk Committee, the structure of the Risk Report has been changed, as a result of which the Supervisory Board is now better able to interpret the reported risks. The position of the Manager Risk Management in relation to the CRO was also clarified in connection with the Risk Report and other risk reports. The Risk Committee also prepared the annual adoption of the Risk Appetite Statement (RAS) by the Supervisory Board. Each year, the Risk Committee furthermore discusses the updated recovery plan and the result of the Supervisory Review and Evaluation Process (SREP). The SREP includes the assessment of risks in relation to capital (ICAAP) and liquidity (ILAAP). The documents drawn up in this context inform the establishment of the capital requirement by the regulator.

In several meetings, the Risk Committee devoted attention to the creation of a Compliance Management Framework (CMF) intended to ensure that BNG Bank demonstrably complies with all laws and regulations applying to it. The CMF is part of the Internal Governance Framework (IGF), the basis for the structure of the internal governance and organisation of the bank. The Risk Committee has questioned the Executive Board and the Compliance

Officer about the design and content of the CMF, the required capacity and the respective responsibilities of all departments involved. Subject to a number of recommendations, the Risk Committee gave the Supervisory Board a positive recommendation on the CMF, the IGF and the related amendment of the Risk Management Charter and Risk Committee Regulations. Furthermore, the Risk Committee has discussed the progress of the service provision relationship with Centric FSS, including the exit scenario in the event that the bank should decide to end the relationship.

HR Committee

The duties of the HR Committee include the recruitment and selection of Supervisory Board and Executive Board members, preparatory work for the appointment or reappointment of Supervisory Board members, periodic evaluation of the performance by the Supervisory Board and the Executive Board as a whole and assessment of the performance of individual Supervisory Board members and Executive Board members. In this regard, the HR Committee prepares decision-making by the Supervisory Board and thus supports the latter in its role as an employer. Next to HR Committee members, its meetings are also attended by the Executive Board members and the Manager HR.

The HR Committee is satisfied with the reinforcement of its role as initiated in 2018 and with the type of meeting documents that are now on the agenda. Employees are a key asset of the bank and it is therefore important for the HR Committee to be involved in the way in which the Executive Board implements the HR strategy. The HR Committee met four times in 2019. The strategic personnel planning was discussed with the Executive Board. Particular attention was devoted to the higher management, the identified key positions and risk-mitigating measures. The HR Committee has evaluated the Executive Board's performance targets for 2018 and is satisfied with the extent to which they were achieved. In individual interviews with the members of the Executive Board, the HR Committee discussed their performance and development in 2018. New performance targets have been set for 2020. The HR Committee and the Executive Board discussed the discontinuation, as from 2020, of the profit-sharing for employees and agrees to the proposed compensation. The Works Council's approval was requested and obtained for implementing this. The HR Committee has received information about measures taken to increase employees' mobility, particularly the introduction of career interviews. Lastly, the HR Committee advised the Supervisory Board on the implementation of the programme for permanent education and the matter of filling vacancies on the Supervisory Board in connection with retirements (by rotation) in 2020.

Remuneration Committee

The Remuneration Committee is responsible for preparing the decisions by the Supervisory Board on the remuneration of the Supervisory Board, the Executive Board and senior management, including decisions that have consequences for the risks and risk management of the company. As is the case for the work of the HR Committee, this responsibility primarily concerns the employer role of the Supervisory Board. Next to members of the Remuneration Committee, its meetings are also attended by the Executive Board members.

The remuneration policy for the Executive Board remained unchanged in 2019. There were no changes in the composition of the Executive Board during the year under review either. Against this background, the Remuneration Committee only needed to meet once in 2019.

The Committee discussed the implementation of the remuneration policy in 2018, both for the Executive Board and for the employees. Special attention was paid in this context to the remuneration of employees who can materially influence the bank's risk profile, designated as 'Identified Staff'. The Committee received information on their variable remuneration and took note of the results of the annual risk analysis for restrained remuneration policy. Additionally, the Committee received information on all bonuses paid – occasionally to individual employees – and gave the Supervisory Board a positive recommendation on the payment of variable remuneration awarded in the past to the Executive Board and employees belonging to the Identified Staff. In the Remuneration Report, which was prepared by the Remuneration Committee, the Supervisory Board reports on the remuneration policy of the Executive Board and the employees, as well as on the implementation of the remuneration scheme for the Supervisory Board.

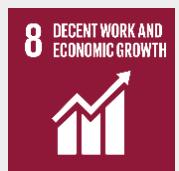
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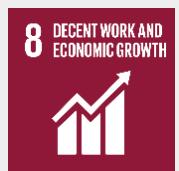
5.1 Connectivity information

The connectivity table below clarifies the interconnections between the material topics, the goals linked to them, the results achieved and the impact on stakeholders. A connection has also been made between material topics and the SDGs, the applicable GRI aspects and the sections in which the material topics are discussed.

Material topic	2019 target	2019 results	2018 results	Impact on stakeholders	Contri- butio- n to SDGs	GRI Con- tent Index	Annual Report section
1. Affordable financing	Market share of loans and advances, granted to or guaranteed by public authorities >55%.	71%	71%	Clients	 8 DECENT WORK AND ECONOMIC GROWTH	201, 203	Local authorities
	Share of promotional loan in portfolio ≥90%.	93%	93%		 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE		Housing associations
	Customer satisfaction ≥8.0.	Reputation survey performed instead of customer satisfaction survey.	No customer satisfaction survey performed.				Healthcare sector
							Education
							Energy and infrastructure
							BNG Sustainability Fund
2. Sustainability financing	Issue of at least one SRI Bond and one Social Housing Bond.	Issue of two SRI Bonds and one Social Housing Bond.	Issue of one SRI bond and one Social Housing Bond.	Clients	 3 GOOD HEALTH AND WELL-BEING	203	Local authorities
					 4 QUALITY EDUCATION		Healthcare sector
							Education

Material topic	2019 target	2019 results	2018 results	Impact on stakeholders	Contribution to SDGs	GRI Content Index	Annual Report section
	Lending for sustainable projects grows compared to prior year.	Achieved.	Achieved.		 7 AFFORDABLE AND CLEAN ENERGY		Energy and infrastructure
					 11 SUSTAINABLE CITIES AND COMMUNITIES		BNG Sustainability Fund
3. Ethics and compliance	Number of complaints and incidents.	One report to Dutch Data Protection Authority due to breach of confidentiality of personal data	No significant complaints and incidents.	Shareholders Clients Investors Employees		102, 205, 206, 307, 419	Compliance
4. Partnerships aimed at increasing sustainability	Making the CO ₂ impact of the loan portfolio measurable.	Achieved ¹ .	New target for 2019.	Clients	 17 PARTNERSHIPS FOR THE GOALS	203	Local authorities Housing associations Healthcare sector Education Energy and infrastructure
5. Encouraging responsible business operations of clients	Making the CO ₂ impact of the loan portfolio measurable.	Achieved ¹ .	New target for 2019.	Clients	 11 SUSTAINABLE CITIES AND COMMUNITIES	203	Local authorities Housing associations
					 12 RESPONSIBLE CONSUMPTION AND PRODUCTION		

Material topic	2019 target	2019 results	2018 results	Impact on stakeholders	Contribution to SDGs	GRI Content Index	Annual Report section
							Healthcare sector
							Education
							Energy and infrastructure
							BNG Sustainability Fund
6. Innovative products and processes	Delivery of client portal.	Achieved.	Not achieved.	Clients		203	Outlook
7. Data security		One report to Dutch Data Protection Authority due to breach of confidentiality of personal data	Achieved.	Shareholders Clients Investors Employees		418	Compliance
8. Reasonable return	See financial targets.	See financial results.	See financial results.	Shareholders		201	Financial results
9. Efficient organisation	Availability of payment transactions ≥99.9%.	Achieved.	Achieved.	Clients, employees		203	
10. Employees with future-oriented skills	Career interviews with employees employed longer than ≥3 years. 5% of employees change jobs.	Achieved.	Not achieved.	Employees		404	Employees

Material topic	2019 target	2019 results	2018 results	Impact on stakeholders	Contribution to SDGs	GRI Content Index	Annual Report section
11. Attractive employer	Diversity: 2.2% of population have limited access to the labour market.	Not achieved.	Not achieved.	Employees		405	Employees
12. Sustainable operations	Reduction of CO ₂ footprint of own organisation by 10% compared with prior year	Achieved.	Achieved.	Employees	 	302, 305	Sustainable operations

¹ The impact has been calculated using the PCAF methodology, through the use of an external agency and based on external sources.

5.2 Reporting principles

Guidelines and codes complied with

With the 2019 Annual Report, we render account of our activities in the 2019 financial year. We do this in accordance with the Dutch Civil Code BW 2: 391 and the EU directive on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings (2013/34/EU) and the EU directive regarding disclosure of non-financial and diversity information by certain large undertakings and groups (2014/95/EU). The Annual Report represents a balanced and complete analysis of the situation on the balance sheet date, the development and the results during the financial year, and it contains financial and non-financial performance indicators. This Annual Report has been prepared in conformity with the 'Comprehensive option' of the GRI Standards (Sustainability Reporting Guidelines of the Global Reporting Initiative). The Annual Report shows, in accordance with the recommendations of the International Integrated Reporting Council (IIRC), how we created financial and non-financial value for our stakeholders in 2019. The report provides an overview of the principal developments and the performance of BNG Bank in 2019 and shows how we deal with opportunities, risks and uncertainties. The Annual Report is based on the topics designated as material by the Executive Board and our stakeholders. The process for determining material topics and reporting priorities is available on the [website](#).

We endorse a number of codes of conduct and international conventions and guidelines. We have undertaken to comply with the Dutch Banking Code (since 2010) and the Dutch Banking Sector Agreement on international responsible business conduct regarding human rights (2016). As a consequence of the latter agreement, we apply as of 2020 the Equator Principles, a risk management framework for determining, assessing and managing environmental and social risk in project finance. We participate in the Sustainable Development Goals and the Spitsbergen Agreement (2018). Together with other financial institutions, we committed ourselves to the Climate Agreement in 2019 and will report on the climate impact of our financing and draw up an action plan to contribute to a reduction in CO₂ emissions. We endorse the 'Future-oriented Banking' package of the Dutch Banking Association (NVB), which brings together the Social Charter, the Dutch Banking Code and a set of the rules of conduct associated with the bankers' oath and by means of which the banking sector states explicitly how it is aiming for service-oriented and sustainable banking. The recommendations under the UN Global Compact, the UN Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises are also complied with and have been implemented in relevant procedures. We comply with the provisions of the Dutch Corporate Governance Code (revised version 2016) by ensuring that working methods are aligned as closely as possible

with the Code, among other things. An overview of compliance with the principles and best practice provisions may be found on our [website](#).

Every year, we participate in the Transparency Benchmark, a survey of the Ministry of Economic Affairs and Climate Policy into the content and quality of external reporting on social aspects of enterprise. In the revised approach of the Transparency Benchmark 2019 (for the 2018 financial year), we fell significantly in the ranking of the most transparent annual reports. We scored few or no points on material topics, value creation, Sustainable Development Goals, business model and supply chain management in particular. We analysed the results of the Transparency Benchmark in detail and looked at the options available for improving the score on the Transparency Benchmark. We hope that we have significantly improved a number of aspects in this Annual Report. Logically, improvement on those aspects is expected also to lead to improved scores in other national international sustainability assessments.

Defining the scope of the Annual Report

Non-financial information for the 2019 calendar year is included in the 2019 Annual Report to inform our stakeholders about our public role, in relation to our mission, strategy and objectives. The information in this report relates to BNG Bank N.V. The two subsidiaries BNG Gebiedsontwikkeling and Hypotheekfonds voor Overheidspersoneel have not been included in this report as both subsidiaries are being phased out. Where non-financial data relate to subsidiaries, this is indicated. There were no potential or actual acquisitions and disposals in the year under review. The performance of our suppliers, sources of funding, clients and other parties in our value chain is not included in our figures.

Data collection

The quantitative and qualitative information in this Annual Report was collected on the basis of requests to provide information, data and interviews. Sources of data include staff records, financial reports, incident registration, the registration of reports from internal confidential counsellors and the Compliance Officer, and the energy consumption records of Facility Management. In addition, interviews were held with employees of Business Development and Public Finance, among others, and information was provided by Finance & Control, Treasury & Capital Markets, Compliance, Risk Management, Human Resources and Processing. We follow the GRI Standards for the quality of the data included in this Annual Report. Reported data are relevant, complete, consistent, accurate and transparent. The non-financial data in this report relate to the 2019 reporting year. Where possible, we also report data and results for prior years. Internal and external audits are performed on all data included in this report.

Calculation of CO₂ emissions of operations

To monitor our progress, we report the CO₂ emissions of our own operations each year on the basis of scope 1, 2 and 3 of the Greenhouse Gas Protocol (see the [Glossary](#) for the definitions). We use 2010 as the baseline year for our CO₂ emissions. Since that year, we have registered our CO₂ emissions on an annual basis. Our CO₂ footprint is calculated using operational control instruments. All business units that fall within the bank's operational control are included in its CO₂ footprint.

Through to 2012, we applied the international conversion factors stated in the Greenhouse Gas Protocol and those of the Department for Environment, Food and Rural Affairs (Defra in the UK), and those set out in the EC IPPC (Industrial Emissions) Directive. In 2013, since BNG Bank is active in the Dutch market, we switched from applying the international conversion factors to using the standard conversation factors generally accepted in the Netherlands instead, in accordance with the CO₂ performance ladder. We apply a single exception to this. Green power is extrapolated as climate-neutral (0 grams CO₂ /kWh). In the Annual Report, since 2016, CO₂ emissions generated by district heating have been calculated on the basis of the STEG emissions factor applied by the supplier (46.2 kg/GJ). In contrast to the CO₂ performance ladder, business flights are attributed to scope 3 (in accordance with the GHG protocol).

We have made a number of assumptions in order to calculate the CO₂ emissions. For instance, we did not know the number of kilometres driven by employees in their own cars for business purposes. However, this is compensated by an estimate made of the private use of leased cars (10,000 km/year). In terms of accuracy, we deem the inherent limitations attached to the assumptions to be non-material.

Principles and method used for determining the CO₂ impact of the credit portfolio

The Telos institute of Tilburg University has calculated the CO₂ impact based on the method developed by the Partnership for Carbon Accounting Financials (PCAF). Of the asset classes distinguished in this method, the following are relevant for BNG Bank: Sovereign Bonds, Project Finance, Commercial Real Estate and Corporate/SME Loans. A somewhat modified method has been developed for the municipalities. This has been discussed with the Chair of the PCAF and included in the PCAF Annual Report.

The measurement has been done in accordance with the general principles laid down by the PCAF:

- Where possible, the seven greenhouse gases from the Kyoto Protocol have been included in the calculation and converted to their CO₂ equivalents.
- The absolute emissions are expressed in metric tonnes of CO₂equivalents (tCO₂e).
- The relative emissions are expressed in metric tonnes of CO₂equivalent/million euros (tCO₂e/M€).
- The follow-the-money principle is applied for measuring the CO₂ impact of financial assets, which means that the financing must be traced as far as possible within the chain in order to properly understand the CO₂ impact on the economy.
- In principle, Scope 1, Scope 2 and the relevant parts of Scope 3 are taken into account in the calculation (see the [Glossary](#) for the definitions). Any deviations from this must be explained.
- The greater the influence of a financial institution on an investment, the larger the proportion of the investment's footprint that needs to be included in the calculation.
- To calculate the share in the carbon footprint, all types of financing (both shares and loans) provided must be taken into account in the calculation. Any deviations from this must be explained.

Data quality

The PCAF distinguishes five quality levels for emissions:

- Class 1 concerns individual emission data or current energy consumption data that have been the subject of an audit.
- Class 2 concerns non-audited emission data or other primary consumption data.
- Class 3 concerns average data specific to the sector or comparable institutions.
- Class 4 concerns approximate data based on the region or country.
- Class 5 concerns rough estimates.

No assurance procedures have been performed by an external auditor for the information in the Classes 2 to 5.

Method used

The share of the financing provided by BNG Bank in the emissions of a client or project is calculated by multiplying the bank's share in the total balance sheet size of this client or project by the total greenhouse gas emissions of this client. The calculation is based on the bank's outstanding loans at year-end 2018. The emission data are derived from or calculated based on public data available from Statistics Netherlands, the Human Environment and Transport Inspectorate, the CBIG (implementing body of the Ministry of Health, Welfare and Sport), the Education Executive Agency (DUO) and sustainability reports of the financed institutions.

Limitations

No data are currently available on the extent of emissions avoided or neutralised as a result of projects financed by us. It was not possible to calculate the Scope 3 emissions for housing associations. This includes emissions resulting from the construction (and major maintenance works) of housing association property (such as transport of building materials, manufacture of pre-fab building elements, etc.). No calculations or data are available for arriving at a reasonable estimate of these emissions. Also Scope 3 emissions for the education sector were not available.

For the 'Other organisations and infrastructure' category, it was possible to identify Scope 1 and Scope 2 emissions of the organisations (utilities sector, waste processing, etc.). Scope 3 data were not available. No data are available for emissions arising during the construction phase of projects.

5.3 Glossary

Attractive employer (material topic): Providing a safe and inclusive work environment and challenging jobs with career opportunities and competitive terms of employment.

Affordable financing (material topic): Offering affordable financing to clients with an attractive mix of size and maturities.

Bond: Tradable proof of participation in a loan, with a fixed nominal value on which interest (usually fixed interest) is paid. The loan is repaid after the term expires. A bond is sustainable if the funds arising from issuing the bond are used solely for sustainable projects.

Compliance: Observance of laws and regulations, as well as working in accordance with the standards and rules drawn up by the institution itself.

Compliance Management Framework (CMF): Policy, work procedures, roles and responsibilities to ensure proper compliance by BNG Bank with the applicable laws and regulations, as a result of which the risk of financial losses or reputational loss due to inadequate compliance with laws and regulations is reduced and becomes manageable.

Consolidated financial statements: The financial statements of a group of legal entities in which the annual figures of both the parent company and its subsidiaries included in the consolidation are aggregated into the accounting figure, and shown as belonging to a single reporting entity.

Corporate governance: Corporate governance is the system of principles and best-practice provisions regulating relations between the Executive Board, the Supervisory Board and the General Meeting of Shareholders. The Dutch corporate governance model is characterised by the two-tier board structure, which provides for a Supervisory Board with supervisory duties and an Executive Board with executive management duties.

Customer Due Diligence Policy (CDD): Policy to ensure that banks know their clients well and monitor them in order to prevent financial and economic crime. With this policy, banks give substance to their important gatekeeper function, which should prevent money from gaining access to the financial banking system.

Data security (material topic): The security of the information systems as well as the data entrusted to BNG Bank comply with the most stringent security requirements.

Disintermediation: Process reflecting the decreasing use of intermediaries by parties. In the financial world, this means that parties make less use of banks and carry out financial transactions directly with each other.

Efficient organisation (material topic): Targeting increased efficiency through effective alignment of work processes and ensuring short lines of communication in the organisation.

Employees with future-oriented skills (material topic): Creating a future-proof workforce by supporting employees in their career development, stimulating job mobility and providing training.

Ethics and compliance (material topic): Acting with due care while observing responsibilities and applicable rules, in a morally responsible manner and on the basis of generally accepted social and ethical norms.

Full time equivalent (FTE): A unit to measure the scope of an employment contract or the workforce. Within BNG Bank, one FTE represents one employee with a full-time working week of 36 hours.

Funding: Raising short-term and long-term capital in various currencies in international money and capital markets.

Global Reporting Initiative (GRI): Sustainability guidelines for reporting on economic, social and environmental performance.

Innovative products and processes (material topic): Preparing for the future by means of product and process innovations.

Integrated Reporting: Reporting framework originating from the International Integrated Reporting Council (IIRC) resulting in an integrated report covering value creation: the external environment influencing the organisation, the incoming and outgoing resources and the way that the organisation interacts with the external environment . The value creation model is used to record the results.

Long-term lending: The provision of loans with a term of more than one year.

Leverage ratio: The ratio between a bank's Tier 1 capital and the adjusted balance sheet total.

Loans not subject to solvency requirements: Loans for which no own capital is required to be maintained, because they are regarded as virtually free of credit risk. Loans granted to or guaranteed by Dutch government authorities are regarded as virtually free of credit risk.

Loans subject to solvency requirements: Loans for which, pursuant to regulations, a certain quantity of own capital must be maintained, as a buffer for the risk that the loan is not repaid.

Market share: BNG Bank's scoring percentage in the credit demand known to the bank.

Material topics: Topics identified using the 'materiality analysis' which are sufficiently important to be reported on in the Annual Report. Whether or not a topic is material depends on the extent to which it influences stakeholders' assessments and decision-making as well as the degree of economic, environmental and social impact.

Materiality analysis: Process in which it is determined with input from stakeholders which topics, known as 'material topics', are sufficiently important to be reported on in the Annual Report.

Partnerships aimed at increasing sustainability (material topic): Cooperation with various public and private partners to support increasing the sustainability of the Netherlands.

Promotional loan: A loan granted directly or via an intermediary credit institution, by a credit institution under public law or an entity established by the central, regional or local government of a Member State, on a non-competitive, not-for-profit basis, in order to promote the policy objectives of the central, regional or local government of a Member State.

Rating: Valuation of banks' creditworthiness, banks' capacity to meet their obligations. The assessment is made by independent, recognised rating agencies, such as Moody's, Fitch and Standard & Poor's.

Reasonable return (material topic): Aiming for a reasonable return on equity.

Return on equity (ROE): Calculated by dividing the net profit minus the distributed dividend on hybrid capital by the aggregate of the equity minus the hybrid capital and the unrealized reserves at the start of the financial year. The unrealized reserves concern the revaluation reserve, the cash flow hedge reserve, the own credit adjustment and the cost of hedging reserve.

Risk appetite: The predetermined aggregated level and the types of risk that an institution is prepared to accept in order to achieve its strategic objectives.

Risk management and risk control: Identifying and controlling potential risks in an institution's business operations.

Risk profile: The extent to which an institution is exposed to risks. The ratings awarded by the external rating agencies are an important indicator for the risk profile.

Scope 1: Direct CO₂emissions caused by fuels that the institution itself purchases and consumes. This concerns emissions from the institution's own buildings and transport and production-related activities.

Scope 2: Indirect CO₂emissions in the business operations of the institution. This concerns the consumption of electricity and heat, physically generated elsewhere.

Scope 3: Other indirect CO₂emissions for which the institution does not itself handle procurement, as well as direct emissions beyond the institution's direct control. This includes,

among other things, the commuting by employees of the institution without lease cars and the consumption by external parties from which the institution procures services (such as air travel).

Services of general economic interest (SGEI): Economic activities that serve a public interest and cannot usually be performed in a cost-effective manner. For that reason, companies that are under an obligation to perform SGEI are entitled to compensation.

Social Housing Bond: A sustainable bond, the available resources from which are used for sustainable activities within the social rental sector.

SRI Bond: Sustainable bond, the available resources from which are used for sustainable activities within sustainable municipalities.

Stakeholders: Groups or individuals who can reasonably be expected to be significantly affected by the institution's activities, products or services and/or whose actions affect the ability of the institution to implement its strategies or achieve its objectives.

Stimulating sustainable operations among clients (material topic): Stimulating clients to take initiatives aimed at increasing the sustainability of society.

Sustainability financing (material topic): Contributing to increasing the sustainability of the Netherlands by financing the energy transition and increasing the sustainability of real estate.

Sustainable operations (material topic): Limiting the environmental impact of own operations by targeting energy reduction and selecting suppliers on the basis of responsible procurement criteria.

Sustainable Development Goals (SDGs): Seventeen sustainability goals aimed at ensuring peace and prosperity for people and the planet, now and in the future, endorsed by all Member States of the United Nations in 2015.

Tier 1 capital ratio: Ratio between the core Tier 1 capital of a bank (equity and reserves) and total risk-weighted assets. The Tier 1 capital ratio is an important measure of the financial strength of a bank. Loans granted to or guaranteed by the Dutch government authorities are regarded as virtually free of credit risk.

Two-tier structure: Two-tier board model where management and supervision are divided between two bodies, to with the Executive Board and the Supervisory Board.

Value creation and the value creation model: See 'Integrated Reporting'.

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6.1 Consolidated financial statements

Consolidated balance sheet		NOTE	31/12/2019	31/12/2018	
Amounts in millions of euros					
Assets					
Cash and balances held with central banks		1	1,272	1,587	
Amounts due from banks		2, 34	66	82	
Cash collateral posted		3, 34	14,643	12,043	
Financial assets at fair value through the income statement		4	1,764	1,606	
Derivatives		5	10,004	8,390	
Financial assets at fair value through other comprehensive income		6, 34	9,222	9,648	
Interest-bearing securities at amortised cost		7, 34	7,764	7,406	
Loans and advances at amortised costs		8, 34	88,279	85,034	
Value adjustments on loans in portfolio hedge accounting		9	16,462	11,566	
Associates and joint ventures		10	35	44	
Property & equipment		11	18	17	
Current tax assets		20	30	7	
Other assets		12, 34	130	79	
Total assets			149,689	137,509	
Liabilities					
Amounts due to banks		13	1,933	2,383	
Cash collateral received		14	1,137	419	
Financial liabilities at fair value through the income statement		15	674	762	
Derivatives		16	22,651	19,223	
Debt securities		17	112,661	103,722	
Funds entrusted		18	5,575	5,800	
Subordinated debts		19	33	32	
Deferred tax liabilities		20	78	99	
Other liabilities		21	60	78	
Total liabilities			144,802	132,518	
Equity					
Share capital			139	139	
Share premium reserve			6	6	
Retained earnings			3,567	3,410	
Revaluation reserve			84	125	
Cash flow hedge reserve			13	10	
Own credit adjustment			8	9	
Cost of hedging reserve			174	222	
Net profit			163	337	
Equity attributable to shareholders		22	4,154	4,258	
Hybrid capital		22	733	733	
Total equity		22	4,887	4,991	
Total liabilities and equity			149,689	137,509	

Consolidated income statement		NOTE	2019	2018
Amounts in millions of euros				
- Interest revenue calculated using the effective interest method			4,889	5,154
- Other interest revenue			634	566
Total interest revenue			5,523	5,720
- Interest expenses calculated using the effective interest method			4,994	5,179
- Other interest expenses			94	107
Total interest expenses			5,088	5,286
Interest result	23		435	434
- Commission income			32	30
- Commission expenses			2	2
Commission result	24		30	28
Result on financial transactions	25		37	112
Results from associates and joint ventures	26		3	4
Other results	27		1	2
Total income			506	580
Staff costs	28		41	40
Other administrative expenses	29		37	33
Depreciation	30		3	3
Total operating expenses			81	76
Net impairment losses on financial assets	31		153	-2
Net impairment losses on associates and joint ventures	32		7	4
Contribution to resolution fund	33		8	12
Bank levy	33		30	31
Total other expenses			198	45
Profit before tax			227	459
Income tax expense	20		64	122
Net profit			163	337
- of which attributable to the holders of hybrid capital			21	19
- of which attributable to shareholders			142	318

The references refer to the notes to the consolidated financial statements. The notes to the consolidated financial statements are an integral part of the consolidated financial statements.

Consolidated statement of comprehensive income		2019	2018
Amounts in millions of euros. All figures in the statement are after taxation.			
Net profit		163	337
Recyclable results recognised directly in equity			
Changes in cash flow hedge reserve:			
- Unrealised value changes	3		-9
Changes in cost of hedging reserve:			
- Unrealised value changes	-50	195	
- Realised value changes transferred to the income statement	2	5	
		-48	200
Changes in the revaluation reserve for financial assets at fair value through other comprehensive income:			
- Unrealised value changes	-23		-36
- Realised value changes transferred to the income statement	-18	-28	
		-41	-64
Total recyclable results		-86	127
Non-recyclable results recognised directly in equity:			
- Change in fair value attributable to change in credit risk of financial liabilities designated at FVTPL	-1		
Total non-recyclable results		-1	
Results recognised directly in equity		-87	127
Total		76	464
- of which attributable to the holders of hybrid capital		21	19
- of which attributable to shareholders		55	445

	2019	2018
Consolidated cash flow statement		
Amounts in millions of euros		
Cash flow from operating activities		
Profit before tax	227	459
Adjusted for:		
- Depreciation	3	3
- Impairments	160	2
- Unrealised results through the income statement	-20	-78
Changes in operating assets and liabilities:		
- Changes in Amounts due from and due to banks (not due on demand)	-532	3
- Changes in Cash collateral posted and received	-1,854	1,908
- Changes in repos and reverse repos	-	-1
- Changes in Loans and advances	-3,432	-181
- Changes in Funds entrusted	-272	283
- Changes in Derivatives	626	1,323
- Corporate income tax paid	-86	-140
- Other changes from operating activities	-232	-326
Net cash flow from operating activities	-5,412	3,255
Cash flow from investing activities		
Investments and acquisitions pertaining to:		
- Financial assets at fair value through the income statement	-3	-
- Financial assets at fair value through other comprehensive income	-1,776	-162
- Interest-bearing securities at amortised cost	-1,824	-2,796
- Investments in associates and joint ventures	-1	-
- Property and equipment	-3	-3
Disposals and redemptions pertaining to:		
- Financial assets at fair value through the income statement	45	23
- Financial assets at fair value through other comprehensive income	2,267	1,085
- Interest-bearing securities at amortised cost	1,516	503
- Assets held for sale	-	29
- Investments in associates and joint ventures	3	1
Net cash flow from investing activities	224	-1,320
Cash flow from financing activities		
Amounts received on account of:		
- Financial liabilities at fair value through the income statement	12	-
- Debt securities	401,879	313,242
Continued on next page		

	2019	2018
Continuation of previous page		
Amounts paid on account of:		
- Financial liabilities at fair value through the income statement	-143	-185
- Debt securities	-396,691	-316,234
- Subordinated debt	-	-
- Dividend distribution on hybrid capital	-25	-25
- Dividend distribution to shareholders	-159	-141
Net cash flow from financing activities	4,873	-3,343
Net change in cash and cash equivalents	-315	-1,408
Cash and cash equivalents as at 1 January	1,591	2,999
Cash and cash equivalents as at 31 december	1,276	1,591
Cash and cash equivalents as at 31 December:		
- Cash and balances held with central banks	1,272	1,587
- Cash equivalents in the Amount due from banks item	4	4
- Cash equivalents in the Amount due to banks item	-	0
	1,276	1,591
Notes to cash flow from operating activities		
Interest income received	5,884	5,585
Interest expenses paid	-5,634	-5,243
	250	342

Consolidated statement of changes in equity

Amounts in millions of euros. All figures in the statement are after taxation.

Balance as at 01/01/2018

	SHARE	PRE- MIUM	REVALU- ATION	CASH FLOW	OWN CREDIT	COST OF HEDGE	RE- TAINED ING	UN- DRAINED EARN- INGS	TABLE TO APPRO- PRIATED PROFIT	EQUITY ATTRIBU- TION	
										SHAR- E PROFIT	HYBRID CAPI- TAL
Balance as at 01/01/2018	139	6	189	19	9	22	3,570	0	3,954	733	4,687

Total comprehensive income

Dividend distribution to the bank's shareholders
Dividend distribution to holders of hybrid capital

	-64		-9	-	200		337	464	464		
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Balance as at 31/12/2018

139	6	125	10	9	222	3,410	337	4,258	733	4,991	
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Appropriation from previous year's profit

						337	-337	0	0		
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Balance as at 01/01/2019

139	6	125	10	9	222	3,747	-	4,258	733	4,991	
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Total comprehensive income

Dividend distribution to the bank's shareholders
Dividend distribution to holders of hybrid capital
Appropriation from previous year's profit

	-41		3	-1	-48		163	76	76		
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Balance as at 31/12/2019

139	6	84	13	8	174	3,567	163	4,154	733	4,887	
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BNG Bank has not recognised any results from minority interests in the consolidated equity which is attributable to third parties. With the exception of hybrid capital, the entire equity is attributable to the shareholders.

Accounting principles for the consolidated financial statements

General company information

The consolidated financial statements were prepared and issued for publication by the Executive Board on 13 March 2020 and will be presented to the General Meeting of Shareholders for adoption on 16 April 2020. BNG Bank is a statutory two-tier company under Dutch law. Half of the Bank's share capital is held by the Dutch State and the other half by municipal authorities, provincial authorities and a district water board. BNG Bank has its registered office at Koninginnegracht 2, The Hague (listed under Chamber of Commerce number 27008387) in the Netherlands and has no branch offices.

Applicable laws and regulations

The consolidated financial statements are prepared in accordance with IFRS, as issued by the International Accounting Standards Board (IASB) and adopted throughout the European Union (EU), and with Part 9, Book 2 of the Dutch Civil Code.

Critical accounting principles applied for valuation and the determination of the result

The consolidated financial statements are prepared on the basis of the going-concern principle. Most balance sheet items are valued at amortised cost. The balance sheet items Financial assets at fair value through the income statement (FVPL), Financial assets at fair value through other comprehensive income (FVOCI), Derivatives and Financial liabilities at fair value through the income statement (FVPL) are recognised at fair value. The balance sheet item Associates and joint ventures is stated according to the equity method. The balance sheet item Property and equipment is stated at cost less accumulated depreciation. Income is recognised if it is likely that the economic benefits will accrue to BNG Bank and the income can be reliably determined. Expenses are allocated where possible to the period in which the services were provided or to the related income counterbalancing these expenses. For a detailed description, please refer to the accounting principles for the individual balance sheet items.

The euro is the functional and reporting currency used by BNG Bank. All amounts in the consolidated financial statements are stated in millions of euros, unless stated otherwise.

Accounting principles for consolidation

Each year, BNG Bank prepares, as the parent company, the consolidated financial statements for the company and its subsidiaries. The financial statements of the parent company and its subsidiaries which are used to prepare the consolidated financial statements are drawn up

at the same reporting date, and are based on uniform principles. All intra-group transactions and balances, including income, expenses and dividends, have been fully eliminated in the consolidated financial statements. The consolidated financial statements comprise all subsidiaries over which BNG Bank has control. The consolidation base subject to prudential regulation (CRR | CRD IV) is identical to the consolidation base under International Financial Reporting Standards (IFRS). Section 'Other information' of this document contains a list of BNG Bank's consolidated subsidiaries. Control exists if BNG Bank is exposed as an investor to variable returns due to its involvement and is able to influence these returns by exercising power over the relevant activities of the investment. Group companies are consolidated in full from the date that control has been acquired until such time as control ceases to exist. In determining whether BNG Bank has control over investment funds in which it holds units or shares, the financial interests held by BNG Bank as a participant are taken into consideration.

Involvement in non-consolidated structured entities

BNG Bank assesses involvement in non-consolidated structured entities on a case-by-case basis, with due regard for the nature, purpose, size and activities of those entities. Investments in investment funds through participating interests or in securitisation positions and covered bond programmes (issued by 'special-purpose entities') are non-consolidated structured entities for BNG Bank. Due to its involvement in these entities, BNG Bank is exposed to variable returns, partly based on their performance. These entities are structured so as to ensure that the location of control is not determined by voting rights or similar rights but rather by the contractual provisions. Structured entities are entities that are incorporated for a specific purpose and clearly delineated activities. BNG Bank does not have control and does not act as a sponsor in these non-consolidated structured entities.

Accounting estimates and judgements

The most significant accounting estimates and judgements applied in these consolidated financial statements relate to fair value measurement of financial instruments and impairment of financial assets. The most important methods and estimates relate to the fair value measurement of financial instruments for which there is no active market (for a more detailed description, see section 'Fair value of Financial Instruments'). BNG Bank uses generally accepted valuation models to measure the fair value of these financial instruments. For level 2 instruments, BNG Bank uses observable inputs to determine forward curves, discounting curves, volatility cubus, inflation curve and spread curves. For level 3 instruments, the main unobservable inputs relate to recovery rates and correlation factors for bonds with a monoline guarantee and credit and liquidity spreads.

The results of these models are based on various assumptions, including the discount rate and the future expected cash flows. Differences in the assumptions may have an effect on the reported values.

For the estimates and judgements to determine the impairment of financial assets we use internal estimation techniques to determine forward-looking information, Probability of Default (PD), Loss Given Default (LGD) and Exposure At Default (EAD). Also to determine the Significant Increase Credit Risk (SICR) internal estimation techniques are used. Furthermore, for credit impaired assets we make an assessment of the net present value of

expected future cash flows (including the valuation of underlying collateral) in three different scenarios, and of the weighting of these scenarios. For further details please refer to 'Impairment of financial assets'.

For a detailed description of the methods and assumptions used, please refer to the accounting principles for the individual balance sheet items or topics. BNG Bank periodically evaluates the estimates and assumptions that it applies. Any revisions are reported in the year in which the estimate is revised.

Balance sheet netting

Financial assets and financial liabilities are only netted on the balance sheet if and insofar as it is certain that the net and simultaneous settlement of the amount receivable and the amount payable can be legally enforced under normal circumstances as well as in the event of default, insolvency and liquidation, and if there is a distinct intention to settle either the net amount as such, or both items simultaneously. For derivatives and taxes, please refer to the specific additional netting rules for the relevant balance sheet items.

Foreign currency

Foreign currency transactions are translated into functional currency on initial recognition at the exchange rate applicable on the transaction date. At the balance sheet date, foreign currency monetary assets and liabilities are translated into functional currency at the closing rate. Exchange rate results are recognised at the balance sheet date in the income statement, under the Result on financial transactions item, with the exception of (the effective portion of) the foreign currency transactions that were designated in a cash flow hedge accounting relationship. These exchange rate differences are recognised in the cash flow hedge reserve.

Segmented information

When deciding on the deployment of resources and performance measurement, BNG Bank distinguishes between lending activities and area development activities. In the management and set-up of its lending operations, BNG Bank does not distinguish between different segments or business units. The Bank's area development activities are not material compared with its lending activities. Therefore, no segmented information is included in this Annual Report.

Applied accounting standards adopted by the EU effective on or after 1 January 2019

BNG Bank has applied the mandatory IFRS standards, amendments and interpretations stated below, as issued by the IASB and adopted by the European Union effective 1 January 2019, to its 2019 financial statements.

- IFRS 16 Leases: This standard has replaced the IAS 17 'Leases' standard, IFRIC 4, SIC-15 and SIC-27, and took effect on 1 January 2019. The EU endorsed this standard on 31 October 2017. The standard introduced a new lease framework; both lessee and lessor are required to recognise all assets and liabilities under the lease contract. BNG Bank concludes several operational lease contracts every year for its own use. For further details, please refer to 'Explanation of consequences of IFRS 16' below.
- Amendments to IFRS 9 Prepayment Features with Negative Compensation: Clarifies that a financial asset passes the SPPI criterion regardless of the event or circumstance that

cause the early termination of the contract and irrespective of which party pays or receives reasonable compensation for the early termination of the contract. The amendment is effective for annual reporting periods beginning on or after 1 January 2019, but earlier application was permitted. The EU endorsed this amendment on 22 March 2018. The amendments have no impact on BNG Bank's results and equity.

- IFRIC Interpretation 23 Uncertainty over Income Tax Treatments: IFRIC 23 is applied to the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates in the case of uncertainty over income tax treatments under IAS 12. This interpretation should be applied retrospectively as at 1 January 2019, without adjustment of comparative figures. The EU endorsed this interpretation on 24 October 2018. The Bank has no uncertain tax treatments at this moment and therefore IFRIC Interpretation 23 has no impact.
- Amendments to IAS 28 Long-term Interests in Associates and Joint ventures: Clarification that companies account for long-term interests in an associate or joint venture – to which the equity method is not applied – using IFRS 9. The amendment is effective for annual reporting periods beginning on or after 1 January 2019. The EU endorsed this amendment on 8 February 2019. BNG Bank already applies the equity method. Therefore the amendments have no impact.
- Annual Improvements to IFRS Standards 2015-2017 Cycle (issued on 12 December 2017): This improvement cycle result in accounting changes for presentation, recognition or measurement purposes as well as terminology or editorial amendments to IFRS 3 'business combinations', IAS 12 Income Taxes and IAS 23 Borrowing costs. The amendments are effective for annual reporting periods beginning on or after 1 January 2019. The EU endorsed the annual improvements on 14 March 2019. The amendments have no impact.
- Amendments to IAS 19, Employee Benefits: In February 2018, the IASB issued amendments to IAS 19, which address the accounting when a plan amendment, curtailment or settlement occurs during the reporting period. The amendments require entities to use the updated actuarial assumption to determine current service cost and net interest for the remainder of the annual reporting period after such an event. The amendments also clarify how the requirements for accounting for a plan amendment, curtailment or settlement affect the asset ceiling requirements. The amendments are effective prospectively for plan amendments, curtailments or settlements that occur on or after 1 January 2019. The EU endorsed the amendment on 14 March 2019. The impact on the bank's equity and result is not material.

Accounting standards adopted by the EU effective on or after 1 January 2020

The amendments to IFRS 9, IAS 39 and IFRS concerning the Interest Rate Benchmark Reform are issued by the IAS on 26 September 2019. It requires BNG to investigate the impact on future cashflows and effectiveness of hedge-instruments due to the uncertainties of the Interest Rate Benchmark. The amendment will be effective prospectively on or after 1 January 2020. The EU endorsed the amendment on 15 January 2020. BNG decided to early adopt this amendment and investigated the impact on the Bank in the current or future reporting periods and on foreseeable transactions. For further details, please refer to 'Explanation of the consequences of Amendments to IFRS 7 and 9 and IAS 39' below.

Accounting standards not adopted by the EU which are not yet applied

BNG Bank does not apply new or amended standards and interpretations issued by the IASB if they have not been adopted by the EU. BNG Bank has also decided against early application of amended standards and interpretations adopted by the EU whose application is mandatory for the financial years on or after 1 January 2020. Only for the amendments regarding the IBOR reform BNG Bank decided to make an exception to early adopt the amendments. There are no new or amended standards, interpretations and improvements which are adopted in 2019 by the EU but not yet applied by BNG Bank.

Explanation of the consequences of IFRS 16 'leases'

IFRS 16 'Leases' has replaced IAS 17 entirely. The new standard was adopted by the EU in October 2017 and is compulsory for financial years commencing on or after 1 January 2019.

In applying IFRS 16 for the first time, the group has used the following practical expedients permitted by the standard:

- Applying a single discount rate to a portfolio of leases with reasonably similar characteristics;
- accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases.

Below, the new IFRS 16 accounting principles are disclosed. Furthermore the IFRS 16 consequences for BNG Bank's equity, the classification of the leases on the balance sheet, the result and the disclosures in the financial statements are elaborated. BNG Bank adopted IFRS 16 retrospectively but does not restate as permitted the 2018 comparative reporting period. BNG Bank has only one lease activity, i.e. the leasing of cars for own use (lessee). Previously the motor vehicles were classified and reported as operational leases. The yearly payments were approximately EUR 1 million and therefore considered as not material to disclose in detail.

Adjustments recognised on adoption of IFRS 16

To assess whether a contract is, or contains, a lease, the bank is required to determine whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The bank as lessee

At the commencement date, a right-of-use asset and a lease liability are recognised. The right-of-use assets are measured at cost less any accumulated depreciation and any accumulated impairment losses and reported as Property and equipment. The lease liability is measured as the present value of the outstanding lease payments and reported as Other liabilities. The interest on the lease liability is recognised as Other interest expense in the income statement.

	CLOSING BALANCE 31/12/2018 IMPACT OF IFRS 16	OPENING BALANCE 01/01/2019
Assets-in-use ¹	2	2
Other liabilities	78	80

¹ The operating lease commitment was not specifically disclosed in the financial statements 2018 as the amounts were considered immaterial. Therefore no reconciliation between this commitment and the lease liabilities recognised in the statement of financial position at the date of initial application is disclosed.

The average discount rate is set at zero percent, which is approximately equal to the incremental borrowing rate at 1 January 2019. As a result, no interest has to be paid. The impact on equity in the opening balance is zero.

Explanation of the consequences of Amendments to IFRS 7 and 9 and IAS 39

In September 2019, the IASB issued the *Interest Rate Benchmark Reform- Amendments to IFRS 9, IAS 39 and IFRS 7*. The EU endorsed the amendment on 15 January 2020. These amendments modify specific hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the hedged items or hedging instruments affected by the current interest rate benchmarks are amended as a result of the on-going interest rate benchmark reforms. The amendment is related to phase 1 of the Interest Rate Benchmark Reform, in 2020 phase 2 will follow which will contain further guidance on the IBOR reform from an accounting perspective.

The amendments are relevant to BNG Bank given that fair values of financial instruments depend on the relevant IBOR and applies hedge accounting to its benchmark interest rate exposure.

The application of the amendments impact BNG Banks accounting in the following ways:

- BNG Bank has issued various foreign currency denominated fixed rate debt which it fair value hedges using cross currency interest rate swaps fixed to EONIA. The amendments permit continuation of hedge accounting even if in the future the hedged benchmark interest rate, EONIA, GBP LIBOR, USD LIBOR or other benchmark rates, may no longer be separately identifiable. However, this relief does not extend to the requirement that the designated interest rate risk component must continue to be reliably measureable. If the risk component is no longer reliably measureable, the hedging relationship is discontinued.
- BNG Bank holds investments in EURO-denominated fixed rate debt securities for liquidity management purposes under a 'held to collect and sell' business model and are measured at fair value through other comprehensive income.

We also have issued EURO-denominated fixed rate loans for lending purposes. The interest rate risk of the securities and loans are hedged using Euribor interest rate swaps and as noted above, the amendments permit continuation of hedge accounting even if in the future the hedged benchmark interest rate, Euribor, may no longer be separately identifiable.

- BNG Bank has floating rate debt, linked to USD LIBOR (issued bond) or other currencies which it cash flow hedges using cross currency basis swaps. The amendments permit continuation of hedge accounting even though there is uncertainty about the timing and amount of the hedged cash flows due to the interest rate benchmark reforms.
- BNG Bank will not discontinue hedge accounting should the retrospective assessment of hedge effectiveness less effective and the hedging relationship is subject to interest rate benchmark reforms. For those hedging relationships that are not subject to the interest rate benchmark reforms the entity will continue hedge accounting.
- BNG Bank will retain the cumulative gain or loss in the cash flow hedge reserve for designated cash flow hedges that are subject to benchmark interest rate reforms even though there is uncertainty arising from the interest rate benchmark reform with respect to the timing and amount of the cash flows of the hedged items. Should the bank consider the hedged future cash flows are no longer expected to occur due to reasons other than interest rate benchmark reforms, the cumulative gain or loss will be immediately reclassified to profit or loss.

BNG Bank has chosen to early apply the amendments to IFRS 9/IAS 39 for the reporting period ending 31 December 2019, which are mandatory for annual reporting periods beginning on or after 1 January 2020. Adopting these amendments allows the bank to continue hedge accounting during the period of uncertainty arising from interest rate benchmark reforms.

BNG Bank is exposed to the following interest rate benchmarks within its hedge accounting relationships, which are subject to interest rate benchmark reform: Euribor, GBP LIBOR, USD LIBOR and JPY LIBOR (collectively 'IBORs'). The hedged items include issued EURO and other foreign currency fixed rate debt, holdings of EURO fixed rate debt securities issued Euribor and USD LIBOR floating rate debt, advances to and deposits from customers linked to EONIA or Euribor, and foreign currency risk.

BNG Bank is closely monitoring the market and the output from the various industry working groups managing the transition to new benchmark interest rates. This includes announcements made by 'IBOR' regulators regarding the transition away from 'IBORs' to EONIA to Euro Short Term Rate (€STR), Sterling Overnight Index Average Rate (SONIA), the Secured Overnight Financing Rate (SOFR), and the Tokyo Overnight Average Rate (TONA) respectively.

In response to the announcements, the BNG Bank has set up an IBOR transition team in which, but not limited to, risk management, treasury, legal, accounting are represented. The team informs the Executive Board on a periodic basis. The aim of the team is to understand where IBOR exposures are within the business and to prepare the bank for a smooth transition to alternative benchmark rates. BNG Bank has planned on a transition of the discount rate from EONIA to €STR for all derivatives as per 22 June 2020. Also, the aim is to have its fall back plans in place by the end of 2020.

For the derivatives of BNG Bank, the International Swaps and Derivatives Association's (ISDA) fall back clauses were made available at the end of 2019 and BNG Bank will begin discussion

with its banks with the aim to implement this language into its ISDA agreements in early 2020 for derivatives.

For BNG Bank's floating rate debt, the bank has started discussions with respective counterparties to amend the EONIA bank loan so that the reference benchmark interest rate will change to €STR given EONIA will cease to exist in January 2022. BNG Bank aims to finalize this amendment in the second half of 2020. For the USD LIBOR issued bond, BNG Bank will begin a dialogue with bondholders in 2020 to propose amendments to the fall back provisions to move from USD LIBOR to the SOFR.

In respect of floating rate customer advances and deposits, BNG Bank is focused on treating customers fairly and considers several aspects of transition including the reduction of clients' exposures to legacy IBOR contracts by amending or replacing existing contracts to include robust fall back provisions or replace IBOR with relevant alternative benchmark interest rates. A communication plan has been set up and in Q1, 2020 client-facing staff will receive a training to have adequate knowledge and competence to respond to customers appropriately.

Below are details of the hedging instruments and hedged items in scope of the IFRS 9/IAS 39 amendments due to benchmark interest rate reform, by hedge type. The terms of the hedged items listed match those of the corresponding hedging instruments.

Hedge type	Instrument type	up to 1 year	1 to 5 years	over 5 years	Hedged item
Fair value hedges	Pay float EUR, receive fixed	EUR 5,375	11,702	21,839	
		USD 4,898	11,599	1,604	Fixed rate issued debt
		GBP	2,572	591	matching critical terms to
		AUD	663	3,150	hedge interest rate risk,
		CHF 1,127	828	1,035	FX risk and option risk.
		Other 327	133	682	
	Pay float EUR, receive fixed EUR	305	6,307	18,047	Portfolio fair value hedge relationship (of the EUR-libor component) of fixed rate loans and debt
	Receive float EUR, pay fixed EUR	4,000	17,331	51,256	securities
	Receive float EUR, pay fixed EUR	572	8,806	8,986	Fixed rate debt securities held in the liquidity portfolio matching critical terms to hedge interest rate risk.
	Receive float EUR, pay fixed GBP			380	GBP inflation linked rate issued debt matching critical terms to hedge interest rate risk, FX risk and option risk.
Cash flow hedges	Pay float EUR, receive float USD	1,558	1,621	452	USD float rate issued debt matching critical terms to hedge interest rate risk, FX risk and option risk.
	Receive float EUR, pay float USD		34	69	USD float rate loan matching critical terms to hedge interest rate risk, FX risk and option risk.
	Pay fixed EUR, receive fixed ZAR	279		93	ZAR fixed rate issued debt matching critical terms to hedge, FX risk and option risk.

BNG Bank will continue to apply the amendments to IFRS 9/IAS 39 until the uncertainty arising from the interest rate benchmark reforms with respect to the timing and the amount of the underlying cash flows that the bank is exposed ends. The bank has assumed that this uncertainty will not end until BNG Bank's contracts that reference IBORs are amended to specify the date the interest rate benchmark will be replaced and the cash flows of the alternative benchmark rate and the relevant spread adjustment. This will, in part, be dependent on the introduction of fall back clauses which have yet to be added to the bank's contracts and the negotiation with lenders and bondholders.

Summary of significant accounting policies

Classification and measurement of financial instruments

BNG Bank classifies its financial assets into the following measurement categories:

- those to be measured at fair value (either through other comprehensive income, or through the income statement); and
- those to be measured at amortised cost. The classification depends on BNG Bank's business model for managing financial assets and the contractual terms of the financial assets' cash flows.

BNG Bank classifies its financial liabilities at amortised cost, unless it has designated liabilities at fair value through the income statement or it is required to measure liabilities at fair value through the income statement, such as derivative liabilities.

Financial assets measured at amortised cost

Financial instruments are measured at amortised cost where they:

- have contractual terms that give rise to cash flows on specified dates, which represent solely payments of principal and interest (SPPI test) on the principal amount outstanding; and
- are held within a business model whose objective is achieved by holding to collect contractual cash flows.

These instruments are initially recognised at fair value plus directly attributable transaction costs and subsequently measured at amortised cost. The measurement of credit impairment is based on the three-stage expected credit loss model described below under Impairment of financial assets. Financial assets measured at amortised cost are included in the balance sheet items Cash and balances held with central banks, Amounts due from banks, Cash collateral posted, Interest-bearing securities at amortised cost and Loans and advances at amortised cost. Interest revenue from these financial assets is included in Interest revenue calculated using the effective interest method.

Financial assets measured at fair value through other comprehensive income

Investments in debt instruments are measured at fair value through other comprehensive income where they:

- have contractual terms that give rise to cash flows on specified dates, which represent solely payments of principal and interest (SPPI test) on the principal amount outstanding; and
- are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

These debt instruments are initially recognised at fair value plus directly attributable transaction costs and subsequently measured at fair value. Gains and losses arising from changes in fair value are included in other comprehensive income within a separate component of equity. This except for the recognition of impairment gains and losses, interest revenue and foreign exchange gains and losses on the instrument's amortized costs which are recognized in profit or loss. Interest revenue from these financial assets is included in Interest revenue calculated using the effective interest method. Impairment losses or

reversals, interest revenue, and foreign exchange gains and losses are also recognised in the income statement. Upon disposal, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to the income statement. The measurement of credit impairment is based on the three-stage expected credit loss model as applied to financial assets at amortised cost. The expected credit loss model is described below under Impairment of financial assets.

Financial assets or liabilities at fair value through the income statement

Items at fair value through the income statement comprise:

- debt instruments with contractual terms that do not represent solely payments of principal and interest (mandatory);
- items specifically designated at fair value through the income statement on initial recognition;
- derivatives; and
- equity instruments.

Financial instruments held at fair value through the income statement are initially recognised at fair value, with transaction costs recognised in the income statement as incurred.

Subsequently, they are measured at fair value and any gains or losses are recognised in the income statement within result on financial transactions as they arise. Interest revenue or expenses from these financial assets and liabilities (except for derivatives involved in hedge accounting) are included in Other interest revenue or Other interest expenses. Interest revenue or expenses from derivatives involved in hedge accounting are included in Interest revenue using the effective interest method or Interest expenses using the effective interest method. Where a financial asset is measured at fair value, a credit valuation adjustment is included to reflect the creditworthiness of the counterparty, representing the movement in fair value attributable to changes in credit risk.

Financial instruments designated as measured at fair value through the income statement

Upon initial recognition, financial instruments may be designated as measured at fair value through the income statement. A financial asset may only be designated at fair value through the income statement if doing so eliminates or significantly reduces measurement or recognition inconsistencies (i.e. it eliminates an accounting mismatch) that would otherwise arise from measuring financial assets or liabilities on a different basis.

A financial liability may be designated at fair value through the income statement if it eliminates or significantly reduces an accounting mismatch or:

- if a host contract contains one or more embedded derivatives; or
- if a group of financial assets and liabilities are both managed and their performance evaluated on a fair value basis in accordance with a documented risk management or investment strategy.

Where a financial liability is designated at fair value through the income statement, the movement in fair value attributable to changes in the Bank's own credit quality is calculated by determining the changes in credit spreads above observable market interest rates and is recognised separately in other comprehensive income within equity.

Equity instruments

BNG Bank does not make use of the option under the standard to measure equity instruments at fair value through other comprehensive income. As a result, investments in equity instruments are measured at fair value through the income statement.

Derecognition of financial assets

A financial asset is derecognised if:

- the contractual right to receive cash flows from the asset has expired; or
- BNG Bank has retained the right to receive cash flows from the asset but has assumed a contractual obligation to pass on these cash flows, in full and without material delay, to a third party pursuant to a special arrangement; or
- the contractual rights to receive cash flows from the asset and virtually all the risks and benefits of this asset have been transferred, i.e. when control over the asset has been transferred.

A write-off is regarded as a derecognition event and is recognised when BNG Bank has no reasonable expectations of recovering (a portion of) the contractual cash flows on a financial asset. In case of a write-off, BNG Bank will directly reduce the gross carrying amount of the financial asset.

If the terms of a financial asset are modified, BNG Bank evaluates whether the cash flows of the modified asset are substantially different. If the cash flows are substantially different, the contractual rights to cash flows from the original financial asset are deemed to have expired. In this case, the original financial asset is derecognised and a new financial asset is recognised at fair value. BNG Bank derecognises a financial liability when its terms are modified and the cash flows of the modified financial liability are substantially different. In this case, a new financial liability based on the modified terms is recognised at fair value. The difference between the carrying amount of the financial liability extinguished and the new financial liability with modified terms is recognised in profit and loss.

A financial liability is also derecognised when the obligation specified in the contract has been discharged or cancelled or has expired. When selling or buying financial assets and liabilities, BNG Bank applies the First In, First Out (FIFO) principle. The difference between the amount settled and the carrying amount of the asset or liability is immediately and fully recognised in the income statement. If an existing financial asset or liability is contractually

exchanged for another contract with the same counterparty on substantially the same terms, the new asset or liability is treated as a continuation of the existing asset or liability. No result is recognised in this case.

Collateral (bonds) furnished by BNG Bank under standard repurchase agreements and securities lending and borrowing transactions are not derecognised because BNG Bank retains substantially all the risks and rewards on the basis of the predetermined repurchase price, and the criteria for derecognition are therefore not met.

Transfer of financial assets

BNG Bank retains the financial assets transferred on its balance sheet if all or substantially all of the risks and benefits attached to (components of) the financial assets transferred are retained. For example, the Bank may transfer financial assets while retaining all or nearly all of the risks and benefits in the context of repurchase transactions.

Impairment of financial assets

From 1 January 2018, BNG Bank assesses on a forward-looking basis the expected credit losses (ECL) for the following categories of financial assets that are not measured at fair value through the income statement:

- debt instruments measured at amortised cost;
- debt instruments measured at fair value through other comprehensive income;
- loan commitments; and
- financial guarantee contracts.

Financial assets migrate through the following three stages based on the change in credit risk since initial recognition. When a modification of a financial asset results in the derecognition of the existing financial asset and the subsequent recognition of the modified asset, the date of modification shall be regarded as the date of initial recognition.

Stage 1: 12-month ECL

BNG Bank recognises an ECL allowance reflecting default events that are possible within the next 12 months for exposures without a significant increase in credit risk (SICR) since initial recognition. In addition, BNG Bank makes use of the Low Credit Risk Exemption (LCRE). This avoids exposures with a low credit risk to move to Stage 2 even when there is a SICR, provided that the increase is such that the total credit risk is still low. In both cases, a 30-day past due period acts as a backstop indicator for movement to Stage 2. The 12-month ECL allowance is calculated for all individual exposures as a function of the Exposure At Default (EAD), Probability of Default (PD) and Loss Given Default (LGD) and incorporates forward-looking information.

Stage 2: lifetime ECL - not credit-impaired

BNG Bank recognises an ECL allowance reflecting default events that are possible during the remaining lifetime of the financial assets for exposures which have had a significant increase in credit risk since initial recognition, but which are not considered credit-impaired. This mainly includes exposures with a credit rating that is not considered to be investment grade and for which the credit rating dropped at least one notch since initial recognition.

In addition, it also includes exposures with payment arrears between 30 and 90 days, as well as exposures subject to forbearance measures. Other qualitative factors considered are significant adverse changes in business, financial and/or economic conditions in which the borrower operates and actual or expected significant adverse change in operating results of the borrower. The Stage 2 lifetime ECL is calculated for all individual exposures as a function of the Exposure At Default (EAD), Probability of Default (PD) and Loss Given Default (LGD) and incorporates forward-looking information.

Stage 3: lifetime ECL - credit-impaired

BNG Bank assesses on an individual exposure level whether exposures are credit-impaired which is fully aligned with the definition of default. This assessment is based on whether one or more events have occurred that have a detrimental impact on the estimated future cash flows of that asset. This includes, but is not limited to, exposures with payment arrears exceeding 90 days. In the event that BNG Bank determines that a counterparty is in default, all related financial assets are considered to be in Stage 3. For exposures that have become credit-impaired, the Bank recognises a lifetime ECL that is determined by taking into account all relevant information, including any collateral or guarantees that apply to the exposure at hand. An instrument is considered to no longer be in default (i.e. to have cured) when it no longer meets any of the default criteria. This will be assessed for each instrument individually.

Determining the stage for impairment

At each reporting date, the Bank assesses whether there has been a significant increase in credit risk for exposures since initial recognition by comparing the risk of default occurring over the remaining expected life from the reporting date and the date of initial recognition. The Bank considers reasonable and supportable information that is relevant and available without undue cost or effort for this purpose. This includes quantitative and qualitative information, as well as forward-looking analysis. BNG Bank also makes use of the Low Credit Risk Exemption (LCRE) in order to avoid exposures to move to Stage 2 even when there is a significant increase in credit risk, as long as the total credit risk is still low. An exposure will migrate to a higher ECL stage as asset quality deteriorates. If asset quality improves up to a point that there is no longer any question of SICR since origination, the ECL allowance reverts from lifetime ECL to 12-month ECL. The allowance for these financial assets is based on a 12-month ECL. When an asset is uncollectible, it is written off against the related provision. Such assets are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off reduce the amount of the expense in the income statement. BNG Bank assesses whether the credit risk on an exposure has increased significantly on an individual basis.

Measurement of ECL

ECLs are derived from unbiased and probability-weighted estimates of expected loss, and are measured as follows.

- Financial assets that are not credit-impaired at the reporting date: as the present value of all cash shortfalls over the expected life of the financial asset discounted by the effective interest rate. The cash shortfall is the difference between the cash flows due to BNG Bank in accordance with the contract and the cash flows that the Bank expects to receive.

- Financial assets that are credit-impaired at the reporting date: as the difference between the gross carrying amount and the present value of estimated future cash flows discounted by the effective interest rate.
- Undrawn loan commitments: as the present value of the difference between the contractual cash flows that are due to the Bank if the commitment is drawn down and the cash flows that the Bank expects to receive.
- Financial guarantee contracts: as the expected payments to reimburse the holder less any amounts that the Bank expects to recover.

ECLs are recognised using a net impairment of financial assets account in the income statement. In the case of debt instruments measured at fair value through other comprehensive income, the measurement of ECLs is based on the three-stage approach as applied to financial assets at amortised cost. The Bank recognises the impairment charge in the income statement, with the corresponding amount recognised in other comprehensive income, with no reduction in the carrying amount of the asset in the balance sheet.

Hedge accounting

The Bank's derivative instruments used to manage interest rate and currency risk are recognised on a trade-date basis at fair value as derivative either on the asset or on the liability side of the balance sheet. BNG Bank applies micro hedge accounting in accordance with IFRS 9 when the conditions set out by the standard are met. The hedge accounting is based on a clearly documented relationship between the item hedged and the hedging instrument. When there is a high (negative) correlation between the hedging instrument on the one hand and the value change of the hedged item or the cash flows generated by the hedged item on the other, the hedge is regarded as effective. The hedging relationship is documented at the time that the hedge transaction is entered into. The hedging relationship is then continually tested in order to assess whether it meets the hedge accounting requirements.

In principle, BNG Bank only uses derivatives as hedging instruments. They are mandatorily measured at fair value in the balance sheet. The counterpart in the hedging relationship is the hedged item, which is generally recognised at amortised cost. Insofar as the hedge accounting relationship is effective, hedge accounting enables the Bank to neutralise the difference in measurement and result recognition between the hedging instruments and the hedged items. BNG Bank applies both fair value and cash flow hedge accounting.

Fair value hedge accounting

BNG Bank applies two types of fair value hedge accounting: micro hedge accounting and portfolio hedge accounting.

Micro hedge accounting

When a derivative is designated as the hedging instrument in a hedging relationship, the changes in the fair value of the derivative are recognised immediately in the income statement together with changes in the fair value of the hedged item that are attributable to the hedged risk. Sometimes, a derivative may be a component of a hybrid financial instrument that includes both the derivative and a host contract. Such embedded derivative instruments are part of a structured financing transaction that is hedged against changes in fair value by means of matching swap contracts. In such cases, both the hedged transaction

and the hedging derivative instrument are recognised at fair value with changes in fair value in the statement of comprehensive income or as a value adjustment of the hedged transaction (item). Currently the Bank's fair value hedges mainly relate to swapping fixed to floating rate transactions. The balance sheet items Financial assets measured at fair value through other comprehensive income, Financial assets measured at amortised cost, Funds entrusted and Debt securities are involved.

If the hedging instrument expires or is sold, terminated or exercised, or when the hedge no longer meets the criteria for hedge accounting, or BNG Bank decides to voluntarily discontinue the hedging relationship, the hedge relationship is discontinued prospectively. If the relationship does not meet the hedge effectiveness criteria, BNG Bank discontinues hedge accounting from the last date on which compliance with hedge effectiveness was demonstrated. If the hedge accounting relationship is terminated for an item recorded at amortised cost, the accumulated fair value hedge adjustment to the carrying amount of the hedged item is amortised over the remaining term of the original hedge by recalculating the EIR. If the hedged item is derecognised, the unamortised fair value adjustment is recognised immediately in the income statement.

Under IFRS 9, cross-currency basis risk is not treated as hedged risk, but as cost of hedging.

Portfolio hedge accounting

Portfolio hedge accounting concerns a group of transactions in euros that are hedged for interest rate risk using a portfolio of derivatives. BNG Bank applies portfolio hedge accounting to the majority of long-term fixed-interest loans (Loans and advances item) and a limited number of fixed-interest securities. There is no relationship between individual hedged items and hedging instruments, but it is shown at the portfolio level that the derivatives involved offset the value changes in the related assets arising from interest rate movements. Due to the lack of a direct relationship between the assets and the derivatives used for hedging, the value adjustments of the hedged interest rate risk are recognised in the Value adjustments on loans in portfolio hedge accounting balance sheet item.

Cash flow hedge accounting

When a derivative is designated as the hedging instrument in a cash flow hedge relationship the effective portion of changes in the fair value of the derivative is recognised directly in other comprehensive income and presented in the cash flow hedging reserve within equity. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in the income statement. The amount recognised in the cash flow hedge reserve is reclassified to the income statement as a reclassification adjustment in the same period as the hedged cash flows affect the income statement. BNG Bank applies cash flow hedge accounting on floating foreign currency transactions and the credit spread of fixed foreign currency transactions. The balance sheet line items Funds entrusted and Debt securities are involved. When a hedging instrument expires, is sold, terminated, exercised, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss that has been recognised in OCI at that time remains in OCI and is recognised when the hedged forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in OCI is immediately transferred to the income statement.

Foreign currency basis spread

Following the adoption of IFRS 9 the forward component of a hedging instrument is no longer part of the hedge relationship. The foreign currency basis spread of a cross-currency interest rate swap is accounted for the same way as the forward element of a forward contract. The change in the foreign currency basis spread of this derivative that relates to the hedged item is recognised in the cost of hedging reserve within equity. The amount accumulated in the cost of hedging reserve is reclassified to the income statement at the same time as the hedged item affects the income statement.

Discontinuance of hedge accounting

The hedge accounting relationship is discontinued when it no longer meets the conditions for hedge accounting, or when the hedged item or hedging instrument is sold or matures. The difference between the preceding balance sheet value and the amortised cost of the hedged item is amortised over the remaining period of the hedged item, to the extent that it is retained on the balance sheet. If all or part of a hedged item is sold or purchased, the relevant portion of the cumulative fair value changes is taken into account in the income statement when determining the result on sales.

Recognition and accounting of financial assets and liabilities

Financial assets and liabilities are recognised based on the trade date. This means that they are recognised from the moment that the Bank is entitled to the benefits or is liable for the obligations arising from the contractual provisions of the financial instrument. This includes both traditional financial instruments (loans, interest-bearing securities and debt securities) and derivatives. Financial assets and liabilities are initially recognised at the transaction price, in other words the fair value plus the transaction costs that are directly attributable to the acquisition of the financial asset or the issuance of the financial liability, with the exception of the transactions recognised at fair value. The transactions included in the latter balance sheet item are measured at fair value without taking into account the transaction costs. If the value of transactions recognised at fair value differs from the transaction price on initial recognition, the profit or loss is included as follows:

- For fair value level 1 or 2 transactions, the difference is recognised directly in the Result on financial transactions item of the income statement.
- For fair value level 3 transactions, the difference is included in the balance sheet as a transitory item, and amortised over the term of the transaction.

After initial recognition, financial assets and liabilities are measured at either amortised cost or fair value, depending on the classification of the transaction. In addition to the notional amount, the amortised cost consists of accrued interest, settled transaction costs and/or premiums or discounts distributed in accordance with the effective interest method over the interest rate maturity of the transaction.

Recognition and accounting of derivative financial instruments

Derivative financial instruments are contracts whose value is derived from one or more underlying prices, indexes or other variables, and typically comprise of instruments such as swaps, forward rate agreements, futures and options. From initial recognition, derivatives are in principle carried at fair value and classified as held for trading. The carrying value of a derivative is remeasured at fair value throughout the life of the contract and any fair value

movements are recognised under the Result on financial transactions item in the income statement. Derivatives are included under assets if they have a net positive fair value or under liabilities for a net negative fair value, with the exception of derivative transactions entered under a 'central clearing house'. For these derivatives, netting takes place of the fair value of all derivatives with a financial counterparty that acts as an intermediary between the Bank and the 'central clearing house'. If the derivative transactions are entered under a central clearing house and are also part of a Settle to Market (STM) derivative contract the derivative position is also netted with the collateral posted/received.

Separated derivatives embedded in financial liabilities

Derivatives embedded in financial liabilities are classified and valued separately if all of the following conditions have been met:

- There is no close relationship between the economic characteristics and risks of the embedded derivative on the one hand and those of the financial instrument.
- The financial instrument is not carried at fair value, with value movements recognised through the income statement.
- A separate derivative instrument on the same terms would match the definition of a derivative.

Derivatives that meet these conditions are recognised in the Derivatives balance sheet item and carried at fair value. Contracts are only reassessed if there is a change in the contractual terms which materially affects the expected cash flows.

Non-separated derivatives embedded in financial liabilities

Derivatives that do not meet the conditions to be separated are included in the balance sheet item where the financial instrument is recognised. This usually concerns options relating to early redemption. The measurement of these derivatives follows the measurement of the financial instrument. If this is the amortised cost, the option is in principle measured at zero. In all other cases, the option is measured at fair value.

Value adjustments on loans in portfolio hedge accounting

This balance sheet item includes value adjustments resulting from the fair value portfolio hedge accounting. This refers to the effective portion of movements in market value resulting from hedging the interest rate risk in financial assets at the portfolio level. The value adjustments recognised are amortised over the maturity period of the hedged financial assets in the income statement.

Amounts due to banks, cash collateral received, debt securities, funds entrusted and subordinated debts

Borrowings (including repurchase transactions) and debt securities are carried in the balance sheet at amortised cost unless the liabilities are measured at fair value through the income statement. As regards transactions in Debt securities and Funds entrusted that are involved in a micro fair value hedge accounting relationship, the amortised cost is adjusted for the effective portion of the movements in fair value arising from interest rate risk. Any repurchased obligations are removed from the balance sheet, and the difference between the carrying amount and the transaction value is recognised in the income statement.

Fair value of financial instruments

The fair value is the price (not adjusted for transaction costs) which, regardless of the company's intention or capability, would be received if a financial asset was sold, or the price that would be paid if a financial liability was transferred in an orderly transaction between market participants as at the measurement date under the current market conditions. The starting point is that the valuation must be viewed from the perspective of market parties, for which only the specific characteristics and limitations of the financial instrument may be taken into consideration. Fair value is based on quoted market prices in active markets or, if unavailable, on modelled valuation techniques. Valuation techniques are generally used to determine the fair value of unlisted assets and liabilities and OTC derivatives. This concerns generally accepted techniques and methods such as option pricing models, discounted cash flows, forward pricing and credit and liquidity spreads. Contractual provisions are taken into account and available objective market data are used, such as market-based yield curves for discounting, correlations, volatilities, cross-currency basis spreads, credit spreads, valuation adjustments and other factors, estimates and assumptions which market parties would use to determine the price. Fair value 'level 3' valuations are based in part on assumptions that are not observable in the market. For a detailed description of how the fair value measurement is determined, please refer to section 'Fair value of financial instruments' in the consolidated financial statements.

Other

Associates and joint ventures

Associates and joint ventures are stated according to the equity method. Associates are companies over which BNG Bank has significant influence on operational and financial policy but no control. In general, significant influence is assumed when BNG Bank holds between 20% and 50% of the shares or voting rights. Joint ventures are collaborations in which BNG Bank and other parties with joint control over the contractual agreements have contractual entitlements to the net assets. These contractual agreements are structured by means of separate legal entities. The joint control of the arrangement is contractually agreed and only exists if the relevant activities under the arrangement require the unanimous consent of the parties sharing control. For a description of the Bank's associates and joint ventures, please refer to section 'Other information' of this document.

Property and equipment

All property and equipment owned by the Bank is valued at cost less accumulated depreciation. Property relates to land, buildings and technical installations. Equipment relates to office machinery, inventory, furniture, hardware, software and artworks. The depreciation period is determined on the basis of the estimated useful life of the assets (see note 11 to the consolidated financial statements). The estimated useful life and residual value are reviewed annually. Depreciation is calculated on a straight-line basis and charged to the income statement. Land is not depreciated.

Impairment of non-financial assets

The carrying amount of BNG Bank's non-financial assets (property and equipment, investments in associates and joint ventures), with the exception of deferred tax assets, is assessed twice a year in order to determine whether there are objective indications of

impairment. To determine impairments, an estimate is made of the realisable value and individual assets are divided into groups at the lowest level at which future cash flows can be identified (cash flow generating units). BNG Bank has not recognised any goodwill. The realisable value of an asset or cash flow generating unit is equal to the higher of the value in use and the fair value minus selling costs. In determining the value in use, the present value of the estimated future cash flows is calculated using a discount rate before tax which reflects both the current market appraisals of the time value of money and the specific risks relating to the asset. Impairments recognised in respect of cash flow generating units are first offset against the carrying amount of any goodwill allocated to the units and subsequently offset pro rata against the carrying amount of the other assets of the unit (or group of units). Non-financial assets which were subject to impairment are reassessed at each balance sheet date. Impairment of a non-financial asset, with the exception of goodwill included in non-financial assets, is reversed through the income statement (Impairments item) if it is possible to establish reliably that the negative effects of the indication for the impairment recognised earlier are mitigated. An impairment is only reversed to the extent that the carrying amount of the asset does not exceed the carrying amount minus depreciation or amortisation, which would have been determined if no impairment had been recognised.

Employee pensions

The Bank classifies its multi-employer pension plan as a defined contribution plan. Under this plan, the members bear almost all of the actuarial and investment risks, while the employer members of the plan are under no obligation to make any supplementary contributions if a deficit occurs in the fund. The obligation consists of payment of the contribution determined by the pension fund. The pension fund determines the contribution each year based on the information contained in its own dataset, taking account of the parameters and requirements specified by the regulatory authority. The obligation to pay a contribution takes effect upon becoming a pension fund member in the relevant year, and not from membership in previous years. The employer's share of the pension contribution and any supplementary amounts are charged to the result in the year to which the contribution relates.

Other employee benefits

Other employee benefits are classified as defined benefit plans for which separate provisions have been formed. These other employee benefits include the continued granting of interest rate discounts on mortgage loans for the benefit of both active and retired BNG Bank employees. The level of the provision is determined on the basis of calculations made every two years by independent actuarial experts, using the Projected Unit Credit Method (PUCM). The provision associated with the mortgage interest rate discount is stated under the Other liabilities balance sheet item. The costs relating to the employee benefits are recognised as staff costs in the income statement. All actuarial results are recognised directly through equity and cannot be recycled to the income statement in subsequent periods. This item also includes a provision for a vitality leave scheme. Under this scheme, active employees with seven or more years of service can take two consecutive months of leave once every seven years while retaining part of their monthly income. The vitality leave scheme is recognised as a defined benefit plan and the costs are recognised as staff costs in the income statement.

Taxes

The nominal tax amount is calculated on the basis of the statutory nominal tax rates and the tax legislation in force. Tax rate adjustments relating to previous years, participation exemptions and non-deductible costs are also applied when determining the effective tax amount in the income statement. Deferred tax assets and deferred tax liabilities are both carried at nominal value. All deferred tax assets and liabilities are stated in the accounts of the parent company of the fiscal unit. Group companies that form part of the fiscal unit use the applicable nominal tax rate. Deferred tax assets and liabilities are recognised as temporary differences between the carrying amounts on the one hand and the tax bases of assets and liabilities on the other. The bank has registered deferred tax assets and liabilities for the actuarial results for the employee benefits provision, for the revaluation reserve, for financial assets at fair value through other comprehensive income, for own credit adjustments and for the cash flow hedge reserve, which all directly change within equity. These deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the periods in which they are expected to be realised. Differences in deferred tax assets and liabilities resulting from a change in tax rates are recognised in the income statement. Deferred tax assets are recognised only to the extent to which taxable profits are expected to be available in the near future to compensate for these temporary differences. Tax assets and liabilities, both current and deferred separately, are netted if they concern the same tax authority and the same type of tax and if netting of these assets and liabilities is permitted by law.

Equity

The balance sheet is drawn up before profit appropriation. This means that the total net result for the financial year is presented in equity. The revaluation reserve for financial assets at fair value through other comprehensive income and the cash flow hedge reserve are adjusted by recognising a deferred tax liability.

Hybrid capital

Hybrid capital concerns perpetual loans involving an annual non-cumulative discretionary payment on the outstanding principal amount, subject to compulsory amortisation in the event that the CET1 ratio falls below 5.125%. This amount will be transferred to the Retained earnings. Amortisation from the Retained earnings is reversed at the moment that the trigger ratio is once again exceeded. BNG Bank is entitled to distribute the interest payment on a discretionary basis in the form of a dividend charged to the Other reserves. The dividend distribution is determined unchanged on the basis of the original principal amount. The distributed dividend is deductible for corporate income tax until 2019 due to a change in law in 2018. This perpetual capital instrument is classified as equity. BNG Bank has the unilateral contractual option of buying back the hybrid capital issued. The tranches issued in 2015 (a nominal amount of EUR 424 million) can be repurchased from May 2021 and subsequently in May of every year. The tranches issued in 2016 (a nominal amount of EUR 309 million) can be repurchased every year from May 2022.

Revaluation reserve

Equity includes a revaluation reserve in which the unrealised changes in fair value of Financial assets at fair value through other comprehensive income, net of tax, are recognised. In the event of a sale, the cumulative revaluation results are recognised in the result on sales. The effective portion of fair value changes in transactions involved in hedge accounting is either

credited or charged to the income statement during the period in which the transactions are involved in a hedge accounting relationship.

Own credit adjustment

Financial liabilities at fair value through the income statement are recognised at the relevant purchase curve, including the spread for 'own credit risk'. The Bank recognises the amount related to changes in fair value attributable to change in credit risk of financial liabilities designated at fair value through the income statement as Own Credit Adjustment (net of deferred tax assets and liabilities) in equity.

Cost of hedging reserve

Under IFRS 9, the foreign currency basis spread of a hedging instrument is no longer part of a hedge relationship. The cost of hedging reserve records movements in foreign currency basis spreads in cross-currency interest rate swaps involved in hedge accounting. The amount accumulated in the cost of hedging reserve is reclassified to the income statement at the same time as the hedged item affects the income statement.

Cash flow hedge reserve

Furthermore, equity includes a cash flow hedge reserve, in which the effective portion of the unrealised changes in the fair value of derivatives in cash flow hedge accounting, net of taxes, resulting from changes in the foreign exchange rates and the credit spread component is recognised. The ineffective portion of the hedged risk for cash flow hedge accounting is recognised under Results on financial transactions.

Interest revenue and interest expenses

Interest revenue and Interest expenses for all interest-bearing instruments included in the balance sheet are calculated on the basis of amortised cost. The effective interest method is used to determine amortised cost. If a transaction measured at amortised cost is sold, the difference between the carrying amount and the net proceeds of the sale is recognised under Interest result.

Commission income and commission expenses

In this item, the commission and fees paid or received are recognised in the period in which the services were provided.

Result on financial transactions

This item comprises unrealised market value changes in:

- all financial instruments due to foreign exchange rate fluctuations;
- derivatives measured at fair value, including market value changes due to the counterparty credit risk (Credit Valuation Adjustment) and due to own credit risk (Debit Valuation Adjustment) for derivative transactions without a daily or limited exchange of collateral;
- financial instruments measured at fair value, with changes in fair value recognised through the income statement;
- effective portions of the hedged interest rate risk in financial assets involved in a fair value hedge accounting relationship;
- the amortisation of changes in value to loans and advances in the hedge accounting portfolio; and

- the ineffective portion of the hedged risk for cash flow hedge accounting.

This item also includes sales and buy-out results for financial instruments measured at fair value. These realised results consist of the difference between the net proceeds of the sale and the carrying amount, including the release of value movements accumulated in equity. Returns from the participating interests (equity instruments) measured at fair value are also recognised under this item. Finally, differences between the fair value and the transaction price of financial assets and liabilities measured at fair value on initial recognition are also included under this item. For fair value level 1 and 2 financial instruments, the difference is recognised directly in the income statement; for fair value level 3 financial instruments, it is amortised over the term of the financial instrument.

Results from associates and joint ventures

This item includes the results from associates and joint ventures, valued in accordance with the equity method. Dividend payments are recognised in the income statement when they are received.

Other results

The other results includes the results not relating to BNG Bank's core operational activities.

Depreciation

Please refer to the Property and equipment section.

Contribution to resolution fund

The European resolution regime is based on the EU Bank Recovery and Resolution Directive (BRRD). The full amount payable will be charged to the income statement in the month of payment. The annual contribution to the European resolution fund is recognised in the income statement under the item Contribution to resolution fund.

Bank levy

In accordance with the Banking Tax Act, banks are required to pay a bank levy in October each year. The full amount payable will be charged to the income statement in the month of payment. The annual levy is recognised in the income statement under the item Bank levy.

Consolidated statement of comprehensive income

The consolidated statement of comprehensive income presents the aggregate net result of the reporting period and the direct changes in equity, net of taxes where applicable. In the statement, the amounts net of taxes are presented in groups of items that can be reclassified from equity to the income statement in the future on the one hand and items that can never be reclassified on the other.

Consolidated cash flow statement

The consolidated cash flow statement has been drawn up in accordance with the indirect method. The cash flows are categorised as cash flows from operating, investing and financing activities. Cash and cash equivalents include cash at hand, the available balances with banks and central banks and overnight interbank loans. These funds have less than three months' maturity from the date of acquisition, are readily convertible into a known amount of cash

and are subject to a negligible risk of changes in value. The changes in loans and advances, funds entrusted, derivatives and amounts due from and due to banks are included in the cash flow from operating activities. Investing activities comprise purchases, sales and redemptions in the investment portfolio, purchases and sales of associates and joint ventures as well as property and equipment. Drawdowns and repayments of subordinated debt and bond loans, as well as the dividend paid, are presented as financing activities.

Notes to the consolidated financial statements

Amounts in millions of euros

Note 34 includes a breakdown of balance sheet values by remaining contractual maturity (due on demand and not due on demand).

1 Cash and balances held with central banks

	31/12/2019	31/12/2018
Cash on hand	0	0
Current account balances with the central bank (due on demand)	1,272	1,587
Total	1,272	1,587

2 Amounts due from banks

The Amounts due from banks item includes all receivables from banks measured at amortised cost.

	31/12/2019	31/12/2018
Short-term loans and current account balances	4	4
Long-term lending	62	78
Total	66	82

Note 37 provides an overview of the breakdown of financial assets subject to impairment into impairment stages.

3 Cash collateral posted

The cash collateral is posted with third parties under netting agreements and as such is not freely available to BNG Bank.

Note 37 provides an overview of the breakdown of financial assets subject to impairment into impairment stages.

4 Financial assets at fair value through the income statement

This item includes:

- Financial assets mandatorily measured at fair value through profit or loss. This concerns financial assets that have failed to pass the SPPI test;
- Financial assets designated as measured at fair value through profit or loss.

	31/12/2019	31/12/2018
Mandatorily measured at FVTPL		
Loans and advances	136	136
Designated as measured at FVTPL		
Loans and advances	555	523
Interest-bearing securities	1,073	947
Total	1,764	1,606

The total redemption value of these loans and advances and interest-bearing securities at year-end 2019 is EUR 1,122 million (2018: EUR 1,114 million). Note 25 explains the changes in fair value recognised through the income statement.

5 Derivatives

This balance sheet item includes the positive fair value of derivatives not settled-to-market. Also as per year-end 2019 the fair value of the receivables related to settle-to-market derivatives are included.

Note 25 explains the changes in fair value recognised through the income statement.

	31/12/2019	31/12/2018
Derivatives not involved in a hedge accounting relationship	324	289
Derivatives involved in a portfolio hedge accounting relationship	2,822	2,853
Derivatives involved in a micro hedge accounting relationship	6,848	5,248
Receivables related to STM derivative contracts	10	-
Total	10,004	8,390

6 Financial assets at fair value through other comprehensive income

This includes purchased interest-bearing securities that are held within the Hold to Collect and Sell business model and for which the bank has not used the fair value option.

	31/12/2019	31/12/2018
Governments	6,363	6,682
Supranational organisations	492	542
Credit institutions	2,287	2,341
Other financial corporations	26	26
Non-financial corporations	54	56
Total	9,222	9,648

Transfers without derecognition

At year-end 2019, BNG Bank had transferred no financial assets in repurchase transactions without derecognition.

Notes 31 and 37 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

7**Interest-bearing securities at amortised cost**

This includes purchased interest-bearing securities that are held within the Hold-to-Collect business model and for which the bank has not used the fair value option.

	31/12/2019	31/12/2018
Governments	1,696	1,464
Credit institutions	-	21
Other financial corporations	5,056	4,951
Non-financial corporations	1,018	977
Allowance for credit losses	-6	-7
Total	7,764	7,406

Notes 31 and 37 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

8**Loans and advances at amortised costs**

The Loans and advances item includes short-term and long-term loans to clients insofar as they pass the SPPI test, as well as current account debit balances held by clients. All positions are held within the Hold-to-Collect business model.

	31/12/2019	31/12/2018
Short-term loans and current account balances	5,023	4,331
Long-term lending	83,449	80,750
	88,472	85,081
Allowance for credit losses	-193	-47
Total	88,279	85,034

Notes 31 and 37 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

9**Value adjustments on loans in portfolio hedge accounting**

This refers to the value adjustments of the effective portion of the hedged interest rate risk of loans and advances involved in a portfolio hedge accounting relationship.

	2019	2018
Movements of value adjustments on loans in portfolio hedge accounting		
Opening balance	11,566	11,813
Elimination of IAS 39 reclassification of financial assets 'available for sale' to 'amortised cost'	-	-128
Movements in the unrealised portion in the financial year	6,204	846
Amortisation in the financial year	-1,258	-834
Realisation from sales in the financial year	-50	-131
Closing balance	16,462	11,566

10**Associates and joint ventures**

	31/12/2019	31/12/2018	31/12/2019	31/12/2018
	PARTICIPATING SHARE	BALANCE SHEET VALUE		
Associates				
Dataland BV, Rotterdam	30%	30%	0	0
Data B Mailservice BV, Leek	45%	45%	3	3
Subtotal			3	3
Joint ventures				
BNG Gebiedsontwikkeling BV, various immaterial participations	See 'Associates and joint ventures'		32	41
Total			35	44

For summarised financial information on associates and joint ventures, please refer to 'Related parties'-section of the consolidated financial statements.

11 Property and equipment

	2019	2018	2019	2018	2019	2018	2019	2018
	PROPERTY		EQUIPMENT		ASSETS-IN-USE		TOTAL	
Historical cost								
Opening balance	49	49	22	19	-	-	71	68
Impact of IFRS 16	-	-	-	-	2	-	2	-
Adjusted opening balance	49	49	22	19	2	-	73	68
Investments	-	0	2	3	0	-	2	3
Value as at 31 December	49	49	24	22	2	-	75	71
Depreciation								
Accumulated depreciation as at 1 January	37	37	17	14	-	-	54	51
Depreciation during the year	1	0	2	3	0	-	3	3
Accumulated depreciation as at 31 December	38	37	19	17	0	-	57	54
Total	11	12	5	5	2	-	18	17

Estimated useful life	
Buildings	33 1/3 years
Technical installations	15 years
Machinery and inventory	5 years
Right-of-use asset	5 years
Hardware and software	3 years

12 Other assets

The other assets are primarily composed of amounts receivable from lending to clients.

13 Amounts due to banks

In 2019, the payables related to 'Settle to Market' (STM) derivative contracts, including variation margin and related price alignment amounts, that are considered as a single unit of account are stated in note 16 Derivatives.

	31/12/2019	31/12/2018
Current account balances	0	0
Payables related to STM derivative contracts	-	1
Deposits	1,377	1,837
Private loans	556	545
Total	1,933	2,383

14 Cash collateral received

The cash collateral is received from third parties under netting agreements and as such is not freely available to BNG Bank.

15 Financial liabilities at fair value through the income statement

This item includes debt securities designated as measured at fair value with changes in fair value recognised through the income statement.

	31/12/2019	31/12/2018
Publicly placed debt securities	408	238
Privately placed debt securities	266	524
Total	674	762

The total redemption value of the debt securities at year-end 2019 is EUR 514 million (2018: EUR 613 million). The difference between the financial liability's carrying amount and the redemption value at year-end 2019 is EUR 160 million (2018: EUR 149 million). Financial liabilities are measured at fair value through the income statement on the relevant funding curve including a mark-up for 'own credit risk'. The total change in value (before tax) was EUR 10 million positive (2018: EUR 11 million positive). Changes in fair value due to own credit risk are recognised through other comprehensive income. These changes are determined by comparing the valuation using the relevant funding curve including a mark-up for 'own credit risk' and the valuation using the relevant funding curve without this mark-up. Note 25 explains the changes in value recognised through the income statement.

16 Derivatives

This balance sheet item includes the negative fair value of derivatives not settled-to-market and the fair value of payables related to settle-to-market derivatives. Note 25 explains the changes in fair value recognised through the income statement.

	31/12/2019	31/12/2018
Derivatives not involved in a hedge accounting relationship	1,004	819
Derivatives involved in a portfolio hedge accounting relationship	20,249	15,586
Derivatives involved in a micro hedge accounting relationship	1,393	2,818
Payables related to STM derivative contracts	5	-
Total	22,651	19,223

17 Debt securities

This includes bonds and other issued debt securities with either fixed or variable interest rates. Any unsold portion of an issue is deducted from the relevant bond.

	31/12/2019	31/12/2018
Bond loans	94,374	89,531
Commercial Paper	9,333	5,323
Privately placed debt securities	8,954	8,868
Total	112,661	103,722

18 Funds entrusted

	31/12/2019	31/12/2018
Current account balances	2,420	2,193
Short-term deposits	25	91
Long-term deposits	3,130	3,516
Total	5,575	5,800

19 Subordinated debt

	31/12/2019	31/12/2018
Subordinated debt	33	32
Total	33	32

20 Taxes

The bank has registered deferred tax liabilities for the actuarial results for the employee benefits provision, for the revaluation reserve for financial assets at fair value through other comprehensive income, own credit adjustment, hybrid capital and for the cash flow hedge reserve, which all directly change into equity.

	31/12/2019	31/12/2018
Current tax assets	30	7
Deferred tax liabilities	-78	-99
Total	-48	-92

BNG Bank and the Dutch tax authorities have concluded a bilateral agreement ('vaststellingsovereenkomst') in 2018 in accordance with IFRS 9, for the period 2018-2020. The bilateral agreement applies to the BNG Bank fiscal unit. Pursuant to the agreement, all financial instruments are stated - for both reporting and tax purposes - in accordance with the IFRS principles of valuation, with the exception of transactions classified as Financial assets at fair value through the income statement. All transactions within this category are valued for tax purposes at the lower of either the cost price or the market value. The result for tax purposes differs from the result for reporting purposes if, on balance, unrealised losses have arisen. If the revaluation reserve increases, the positive amount is added to the annual profit for tax purposes up to the level at which the cost price is reached.

The reconciliation between the effective tax rate and the nominal tax rate is as follows:

	2019	2018
Nominal and effective tax rate		
Profit before tax	227	459
Tax levied at the nominal tax rate	-57	-114
Tax adjustment from previous years	0	0
Participation exemption	0	0
Non-deductible interest on hybrid capital	-	-
Non-deductible costs (bank levy)	-7	-8
Effective tax	-64	-122
Nominal tax rate	25.0%	25.0%
Effective tax rate	28.2%	26.6%

Due to expected changes in the nominal tax rate in 2021, the deferred taxes are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled.

	2019			
	OPENING BALANCE	CHANGES THROUGH EQUITY	CHANGES THROUGH THE INCOME STATEMENT	CLOSING BALANCE
Changes in deferred taxes				
Fiscal treatment opening balance sheet	0	-	-	0
Financial assets at fair value through other comprehensive income	-32	8	-	-24
Cash flow hedge reserve	-62	9	-	-53
Own Credit Adjustment	-2	0	-	-2
Hybrid capital	-4	4	-	0
Employee benefits provision	1	-	0	1
Total	-99	21	0	-78

	2018			
	OPENING BALANCE	CHANGES THROUGH EQUITY	CHANGES THROUGH THE INCOME STATEMENT	CLOSING BALANCE
Changes in deferred taxes				
Fiscal treatment opening balance sheet	0	-	-	0
Financial assets available-for-sale	-102	102	-	-
Financial assets at fair value through other comprehensive income	-	-32	-	-32
Cash flow hedge reserve	-65	3	-	-62
Own Credit Adjustment	-3	1	-	-2
Hybrid capital	-4	0	-	-4
Employee benefits provision	1	-	0	1
Total	-173	74	0	-99

21 Other liabilities

	31/12/2019	31/12/2018
Employee benefits provision	2	2
Other liabilities	58	76
Total	60	78

The employee benefits provision is made up of two parts, a provision for the interest rate discount on mortgage loans to both active and retired employees of EUR 1 million (2018: EUR 1 million) and a provision for vitality leave of EUR 1 million (2018: EUR 1 million). Both provisions have a long-term character.

The movements in the present value of the net liability in relation to the defined benefits relating to the mortgage interest rate discount and the provision for vitality leave are as follows:

	2019	2018
Employee benefits provision		
Net liability as at 1 January	2	2
Movements in the provision	0	0
Net liability as at 31 december	2	2

The other liabilities are mainly composed of amounts payable related to derivatives and other financial transactions which are settled in the next period.

22 Equity

Since BNG Bank has no minority interests after consolidation, the entire consolidated equity, excluding hybrid capital, is attributable to shareholders. The items included in equity are explained below.

	31/12/2019	31/12/2018
Share capital	139	139
Share premium reserve	6	6
Revaluation reserve	84	125
Cash flow hedge reserve	13	10
Own credit adjustment	8	9
Cost of hedging	174	222
Retained earnings	3,567	3,410
Unappropriated profit	163	337
Equity attributable to shareholders	4,154	4,258
Hybrid capital	733	733
Total	4,887	4,991

	2019	2018
Number of paid-up shares outstanding	55,690,720	55,690,720
Proposed dividend per share in euros	1.27	2.85
Proposed dividend		
- Primary dividend pursuant to the Articles of Association	7	7
- Proposed dividend above the primary dividend	64	152
Total	71	159

The proposed dividend distribution for 2019 takes into account the EUR 25 million dividend (before tax) that has already been paid on the hybrid capital in 2019. This payment was charged to the Retained earnings.

Share capital

The authorised capital is divided into 100 million shares with a nominal value of EUR 2.50 each, of which 55,690,720 shares have been issued and fully paid up. The number of shares

in circulation remained unchanged during the financial year. There are no issued shares that are not fully paid up. BNG Bank and its subsidiaries hold no company shares. None of the shares carry preferential rights, nor are they subject to restrictions. There are no options that can be exercised to obtain entitlement to the issue of shares.

Share premium reserve

There were no movements in 2019 and 2018.

Revaluation reserve

At year-end 2019, the revaluation reserve includes EUR 161 million in unrealised value changes, excluding the value of the hedged part of the interest-rate risk of interest-bearing securities involved in hedge accounting, which is a part of the Financial assets at fair value through other comprehensive income. The revaluation reserve has been adjusted for taxes. Upon the sale of these assets, the associated cumulative result recognised in equity is transferred to the income statement.

Cash flow hedge reserve

The effective portion of the unrealised changes in the value of derivatives involved in a cash flow hedge relationship, resulting from changes in the foreign exchange rates, are recognised in the cash flow hedge reserve. The cash flow hedge reserve is adjusted for taxes.

Own credit adjustment

The Own Credit Adjustment amounts to EUR 8 million net of taxes (2018: EUR 9 million). This adjustment relates to changes in credit risk of financial liabilities measured at fair value through the income statement.

Cost of hedging reserve

The cost of hedging reserve records movements in foreign currency basis spreads in crosscurrency swaps involved in hedge accounting and is amortised over the life of the hedge. The cumulative movements will reduce to nil by maturity of the hedging instrument.

Retained earnings

After determination of the appropriations of the distributable profit pursuant to the Articles of Association, the General Meeting of Shareholders decides which portion of the remaining profit is added to the Retained earnings. In 2019, a dividend of EUR 159 million (2018: EUR 141 million) was paid out to the bank's shareholders, charged to the Retained earnings. EUR 25 million (before tax) was distributed to the holders of the hybrid capital in 2019 (2018: EUR 25 million), charged to the Retained earnings. The Retained earnings include a share premium related to hybrid capital of EUR 0.1 million in total (2018: EUR 0.1 million).

Unappropriated profit

The balance sheet is prepared prior to profit appropriation. This item represents the total result achieved after deduction of corporate income tax.

Hybrid capital

The bank's hybrid capital amounts to EUR 733 million. In 2019 no additional hybrid capital was issued. Hybrid capital concerns perpetual loans involving an annual non-cumulative

discretionary payment on the outstanding principal amount, subject to compulsory amortisation in the event that the CET1 ratio falls below 5.125%. The payment qualifies as dividend under IFRS and is charged to the Retained earnings. This dividends are not deductible anymore for this dividend for corporate income tax purposes ended on 31 December 2018.

The instruments are structured in line with CRR requirements and the EBA guidelines and qualifies as additional Tier 1 capital. BNG Bank has the unilateral contractual option of repaying the perpetual capital instruments prematurely on the sixth coupon due date (in May 2021 and 2022) and subsequently every year on the coupon due date.

23 Interest result

Interest revenue calculated by using the effective interest method includes all positive interest results from both financial instruments and derivatives involved in hedge accounting, including negative interest expenses on financial liabilities. In addition, other credit-related income received is included in this item. Interest revenues on assets that were subject to impairment are recognised on the original effective interest percentage, as long as the expected interest cash flows are received.

Interest expenses calculated by using the effective interest method include all negative interest results from both traditional financial instruments and derivatives involved in hedge accounting, including negative interest revenue on financial assets. The costs of borrowing as well as other interest-related charges are also recognised.

Other interest revenue and expenses consist mainly of interest results of derivatives not involved in hedge accounting and interest results of financial assets and liabilities measured at fair value.

	2019	2018
Interest revenue		
Interest revenue calculated by using the effective interest method:		
- Financial assets at amortised cost	2,149	2,255
- Financial assets at fair value through other comprehensive income	143	182
- Derivatives involved in hedge accounting	2,561	2,673
- Negative interest expenses on financial liabilities	36	44
	4,889	5,154
Other interest revenue:		
- Financial assets designated at fair value through the income statement	42	47
- Financial assets mandatory at fair value through the income statement	3	3
- Derivatives not involved in hedge accounting	589	516
- Other	0	0
	634	566
Total interest revenue	5,523	5,720

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	2019	2018
Interest expenses		
Interest expenses calculated by using the effective interest method:		
- Financial liabilities at amortised cost	2,416	2,370
- Derivatives involved in hedge accounting	2,429	2,705
- Negative interest expenses on financial assets	149	104
	4,994	5,179
Other interest expenses		
- Financial liabilities designated at fair value through the income statement	31	64
- Derivatives not involved in hedge accounting	58	36
- Other	5	7
	94	107
Total interest expenses	5,088	5,286
Total interest result	435	434

The interest revenue in 2019 includes EUR 2 million (2018: EUR 1 million) in interest revenue for financial assets, relating to Financial assets at amortised cost (notes 7 and 8) and Financial assets at fair value through other comprehensive income (note 6), which were subject to impairment.

24 Commission result

Commission income

This item includes income from services provided to third parties.

	2019	2018
Income from loans and credit facilities	23	21
Income from payment services	9	9
Total	32	30

Commission expenses

This item comprises expenses totalling EUR 2 million (2018: EUR 2 million) relating to services rendered by third parties in relation to loans, credit facilities and payment services.

25 Result on financial transactions

This item includes the result on financial transactions broken down into realised and unrealised market value adjustments.

	2019	2018
Market value changes in financial assets at fair value through the income statement resulting from changes in credit and liquidity spreads, consisting of:		
- Interest-bearing securities	29	11
- Structured loans	0	-2
	<hr/>	<hr/>
Result on hedge accounting	29	9
- Portfolio fair value hedge accounting	-28	18
- Micro fair value hedge accounting	38	-2
- Micro cash flow hedge accounting	-2	-2
	<hr/>	<hr/>
Change in counterparty credit risk of derivatives (CVA/DVA)	8	14
Realised sales and buy-out results	-10	12
Other market value changes	21	36
	<hr/>	<hr/>
Total	37	111

Also in 2019, the result on financial transactions was positively affected by realised and unrealised results. The realised results of EUR 21 million (2018: 36 million) were mainly related to sales of interest-bearing securities out of the liquidity portfolio. The unrealised results amounted to EUR 15 million (2018: 75 million). The reduced credit and liquidity risk spreads of most interest-bearing securities recorded under Financial assets at fair value through the income statement led to a positive result of EUR 29 million (2018: 11 million). The unrealised results were also positively affected for the result on hedge accounting, while the result of counterparty credit risk of derivative and other market value changes had a negative impact on the total result on financial transactions. The other market value changes also include the effects of movements in the USD/EUR and EUR/GBP cross-currency basis spreads of derivatives not involved in a hedge accounting relationship.

26 Results from associates and joint ventures

	2019	2018
Associates	1	2
Joint ventures	2	2
Total	3	4

For a description of the bank's associates and joint ventures, please refer to item 'Related parties' of the consolidated financial statements.

27 Other results

The other results consist mainly of income from consultancy services provided by BNG Gebiedsontwikkeling.

28 Staff costs

	2019	2018
Wages and salaries	28	27
Pension costs	5	4
Social security costs	3	3
Additions to the employee benefits provision	0	0
Other staff costs	5	6
Total	41	40

The variable remuneration of individual staff members in 2019 was maximized at 20% of their fixed salary (2018: 20%).

29 Other administrative expenses

These expenses include, among other things, outsourcing costs, maintenance costs of property and equipment, printing costs, training expenses and advertising expenses. The total other administrative expenses for 2019 amounted to EUR 37 million (2018: EUR 33 million).

The fees paid to independent auditors are also included in Other administrative expenses. In conformity with Section 382a of Part 9, Book 2 of the Dutch Civil Code, a breakdown of the fees paid to the independent auditors for audits and audit-related and non-audit-related services is given in note 32 to the company financial statements.

30 Depreciation

A breakdown of this item is included in the note on Property and equipment (note 11). In total, the depreciation charges amounted to EUR 3 million in 2019 (2018: EUR 3 million).

31 Net impairment losses on financial assets

The impairments in 2019 amounted to a loss of EUR 153 million in the income statement (2018: EUR 2 million profit).

In 2019 the bank incurred a, compared to prior years, large impairment due to changes in credit risk. This impairment is mainly a result of the decreased credit worthiness of an obligor that provides services to municipalities.

	2019			
	STAGE 1	STAGE 2	STAGE 3	TOTAL
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	3	3	0	6
- Decreases in allowances due to derecognition	-2	-4	0	-6
- Changes in allowances due to changes in credit risk (net)	1	4	148	153
	2	3	148	153
Impairment results not due to movements in allowances:				
- Reversal of impairment due to cash flows received from past write-offs			0	0
- Impairments due to write-offs			0	0
	0	0	0	0
Net impairment result on financial assets	2	3	148	153

	2018			
	STAGE 1	STAGE 2	STAGE 3	TOTAL
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	4	8	0	12
- Decreases in allowances due to derecognition	-3	-9	-4	-16
- Changes in allowances due to changes in credit risk (net)	0	4	-1	3
	1	3	-5	-1
Impairment results not due to movements in allowances:				
- Reversal of impairment due to cash flows received from past write-offs			0	0
- Impairments due to write-offs			-1	-1
	0	0	-1	-1
Net impairment result on financial assets	1	3	-6	-2

Movement in allowances for expected credit losses

	2019			
	STAGE 1	STAGE 2	STAGE 3	TOTAL
Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	3	3	0	6
- Decreases in allowances due to derecognition	-2	-4	0	-6
- Changes in allowances due to changes in credit risk (net)	1	4	148	153
	2	3	148	153
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs			-5	-5
	0	0	-5	-5
Total movements in allowances	2	3	143	148

	2018			
	STAGE 1	STAGE 2	STAGE 3	TOTAL
Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	4	8	0	12
- Decreases in allowances due to derecognition	-3	-9	-4	-16
- Changes in allowances due to changes in credit risk (net)	0	4	-1	3
	1	3	-5	-1
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs			-8	-8
	0	0	-8	-8
Total movements in allowances	1	3	-13	-9

Note 37 provides an overview of the breakdown of financial assets subject to impairment into impairment stages.

32 Net impairment losses on associates and joint ventures

	2019	2018
Impairment of associates and joint ventures	10	5
Reversal of impairment of associates and joint ventures	-3	-1
Total	7	4

Impairments on four BNG Gebiedsontwikkeling participations amounted to EUR 10 million (2018: EUR 5 million) and impairments on two participations were reversed for a total of EUR 3 million (2018: EUR 1 million). The reversal of impairment is a consequence of renegotiations with other participants about restructuring the participation and as a result of the improved market conditions. All participations are valued on a going concern basis.

33 Contribution to resolution fund and bank levy

The European resolution regime arising from the Bank Recovery and Resolution Directive entered into force on 1 January 2015. The expenses for the resolution fund are deductible for corporate income tax purposes. The EUR 8 million payable for 2019 (2018: EUR 12 million) was paid in June 2019 and charged to the income statement.

The expenses concerning the bank levy are not deductible for corporate income tax purposes. As a consequence, the effective tax burden exceeds the nominal tax burden. BNG Bank is due to pay the bank levy in October of every year, which for 2019 amounted to EUR 30 million (2018: EUR 31 million). The calculation of the levy is stated in note 31 of the Company financial statements.

34**Breakdown of balance sheet value by remaining contractual maturity of financial instruments**

	31/12/2019				
	DUE ON DEMAND	UP TO 3 MONTHS	3 - 12 MONTHS	1 - 5 YEARS	OVER 5 YEARS
					TOTAL
Cash and balances held with central banks	1,272				1,272
Amounts due from banks	5	10	10	30	11
Cash collateral posted		14,643			14,643
Financial assets at fair value through the income statement		34	52	286	1,392
Derivatives	903	1,497		4,028	3,576
Financial assets at fair value through other comprehensive income		173	337	4,842	3,870
Interest-bearing securities at amortised cost		143	565	3,181	3,875
Loans and advances	1,331	6,046	8,545	32,206	40,151
Value adjustments on loans in portfolio hedge accounting		10	99	1,760	14,593
Current tax assets			30		30
Other assets		129	1		130
Total assets	2,608	22,091	11,136	46,333	67,468
					149,636
Amounts due to banks		1,334	69	100	430
Cash collateral received		1137			1,137
Financial liabilities at fair value through the income statement		15	4	211	444
Derivatives	296	953		6,020	15,382
Debt securities		14,036	13,172	49,008	36,445
Funds entrusted	2,433	295	281	1,678	888
Subordinated debt		1		18	14
Current tax liabilities					0
Deferred tax liabilities			4	16	58
Other liabilities		53	2	3	2
Total liabilities	2,433	17,167	14,485	57,054	53,663
					144,802

	31/12/2018					
	DUE ON DEMAND	UP TO 3 MONTHS	3 - 12 MONTHS	1 - 5 YEARS	OVER 5 YEARS	
					TOTAL	
Cash and balances held with central banks	1,587				1,587	
Amounts due from banks	4	9	9	46	14	82
Cash collateral posted		12,043				12,043
Financial assets at fair value through the income statement		11	46	231	1,318	1,606
Derivatives	333		1,089	4,168	2,800	8,390
Financial assets at fair value through other comprehensive income		108	249	4,322	4,969	9,648
Interest-bearing securities at amortised cost		399	801	2,837	3,369	7,406
Loans and advances	1,284	5,233	9,324	32,739	36,454	85,034
Value adjustments on loans in portfolio hedge accounting		10	86	1,870	9,600	11,566
Current tax assets			7			7
Other assets		79				79
Total assets	2,875	18,225	11,611	46,213	58,524	137,448
Amounts due to banks	-	1,783	80	95	425	2,383
Cash collateral received		419				419
Financial liabilities at fair value through the income statement		3	5	221	533	762
Derivatives		638	874	5,579	12,132	19,223
Debt securities		8,550	13,532	48,739	32,901	103,722
Funds entrusted	2,193	156	478	2,060	913	5,800
Subordinated debt		1		18	13	32
Deferred tax liabilities			5	20	74	99
Other liabilities		73	1	2	2	78
Total liabilities	2,193	11,623	14,975	56,734	46,993	132,518

35 Breakdown of financial instruments by category

	31/12/2019			
	AMORTISED COST	FAIR VALUE THROUGH PROFIT OR LOSS	FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	TOTAL
Cash and balances held with central banks	1,272			1,272
Amounts due from banks	66			66
Cash collateral posted	14,643			14,643
Financial assets at fair value through the income statement		1,764		1,764
Derivatives		10,004		10,004
Financial assets at fair value through other comprehensive income			9,222	9,222
Interest-bearing securities at amortised cost	7,764			7,764
Loans and advances	88,279			88,279
Value adjustments on loans in portfolio hedge accounting	16,462			16,462
Total assets	128,486	11,768	9,222	149,476
Amounts due to banks	1,933			1,933
Cash collateral received	1137			1,137
Financial liabilities at fair value through the income statement		674		674
Derivatives		22,651		22,651
Debt securities	112,661			112,661
Funds entrusted	5,575			5,575
Subordinated debt	33			33
Total liabilities	121,339	23,325	0	144,664

			31/12/2018	
	AMORTISED COST	FAIR VALUE THROUGH PROFIT OR LOSS	FAIR VALUE THROUGH OTHER COMPREHEN- SIVE INCOME	TOTAL
Cash and balances held with central banks	1,587			1,587
Amounts due from banks	82			82
Cash collateral posted	12,043			12,043
Financial assets at fair value through the income statement		1,606		1,606
Derivatives		8,390		8,390
Financial assets at fair value through other comprehensive income			9,648	9,648
Interest-bearing securities at amortised cost	7,406			7,406
Loans and advances	85,034			85,034
Value adjustments on loans in portfolio hedge accounting	11,566			11,566
Total assets	117,718	9,996	9,648	137,362
Amounts due to banks	2,383			2,383
Cash collateral received	419			419
Financial liabilities at fair value through the income statement		762		762
Derivatives		19,223		19,223
Debt securities	103,722			103,722
Funds entrusted	5,800			5,800
Subordinated debt	32			32
Total liabilities	112,356	19,985	0	132,341

36**Reconciliation of movements of liabilities to cash flows arising from financing activities**

	2019				
	FINANCIAL LIABILITIES AT FAIR VALUE THROUGH THE INCOME STATEMENT	DEBT SECURITIES	SUBORDINATED DEBT	HYBRID CAPITAL	TOTAL
Balance at 1 January 2019	762	103,722	32	733	105,249
Cash flows from financing activities					
Proceeds from financing activities	12	401,879	4		401,895
Repayments on financing activities	-140	-396,661	-4		-396,805
Interest and other cash flows	-18	-1,909	-1		-1,928
Dividend distribution on hybrid capital				-25	-25
	-146	3,309	-1	-25	3,137
Non-cash changes					
Unrealised results:					
- Foreign exchange movement	21	1,509	-		1,530
- Fair value changes	12	1858	-		1,870
Realised results	25	2,263	2		2,290
	58	5,630	2	-	5,690
Dividend distributed from Other reserves				25	25
Balance at 31 December 2019	674	112,661	33	733	114,101

	2018				
	FINANCIAL LIABILITIES AT FAIR VALUE THROUGH THE INCOME STATEMENT	DEBT SECURITIES	SUBORDINATED DEBT	HYBRID CAPITAL	TOTAL
Balance at 1 January 2018	944	104,323	31	733	106,031
Cash flows from financing activities					
Proceeds from financing activities	-	313,242	-		313,242
Repayments on financing activities	-185	-316,234	-		-316,419
Interest and other cash flows	-26	-1,736	-1		-1,763
Dividend distribution on hybrid capital				-25	-25
	-211	-4,728	-1	-25	-4,965
Non-cash changes					
Unrealised results:					
- Foreign exchange movement	23	2,156	-	-	2,179
- Fair value changes	-29	-186	-	-	-215
Realised results	35	2,157	2	-	2,194
	29	4,127	2	0	4,158
Dividend distributed from Other reserves				25	25
Balance at 31 December 2018	762	103,722	32	733	105,249

37**Impairment of financial assets and off-balance sheet commitments****Breakdown of financial assets and off-balance sheet commitments into impairment stages**

The following tables provide a breakdown of the financial assets subject to impairment and off-balance sheet commitments into the 3 impairment stages:

Stage 1: performing exposures without significant increase in credit risk (SICR) since initial recognition.

Stage 2: performing exposures with significant increase in credit risk since initial recognition (not credit-impaired).

Stage 3: non-performing exposures (credit-impaired).

	31/12/2019						
	CARRYING AMOUNT	GROSS CARRYING AMOUNT			ALLOWANCE FOR CREDIT LOSS		
		PERFORMING		NON-PERFORMING	PERFORMING		NON-PERFORMING
		STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3
Financial assets subject to impairment							
Cash and balances held with central banks		1,272	1,272				
Amounts due from banks		66	66	0		0	0
Cash collateral posted		14,643	14,643				
Financial assets at fair value through OCI ¹		9,222	9,166	56		0	-1
Interest-bearing securities at amortised cost		7,764	7,665	105		-1	-5
Loans and advances		88,279	86,742	1,440	290	-5	-31
Total		121,246	119,554	1,601	290	-6	-37

	31/12/2018						
	CARRYING AMOUNT	GROSS CARRYING AMOUNT			ALLOWANCE FOR CREDIT LOSS		
		PERFORMING		NON-PERFORMING	PERFORMING		NON-PERFORMING
		STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3
Financial assets subject to impairment							
Cash and balances held with central banks		1,587	1,587				
Amounts due from banks		82	82	0	0	0	
Cash collateral posted		12,043	12,043				
Financial assets at fair value through OCI ¹		9,648	9,595	53		0	-1
Interest-bearing securities at amortised cost		7,406	7,319	94		-1	-6
Loans and advances		85,034	83,664	1,360	57	-4	-27
Total		115,800	114,290	1,507	57	-5	-34

¹ The allowance for credit loss for financial assets at FVOCI is included in OCI and not in the (net) carrying amount.

	31/12/2019						
	NOMINAL AMOUNT			PROVISION			
	PERFORMING		NON-PERFORMING	PERFORMING		NON-PERFORMING	
	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	
Off-balance sheet commitments							
Contingent liabilities		59	1		0	0	
Revocable facilities		3,630	126	8	0	0	-3
Irrevocable facilities		7,014	113	24	-1	-1	
Total		10,703	240	32	-1	-1	-3

	31/12/2018					
	NOMINAL AMOUNT			PROVISION		
	PERFORMING		NON-PERFORMING	PERFORMING		NON-PERFORMING
	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3
Off-balance sheet commitments						
Contingent liabilities	31	1		0	0	
Revocable facilities	6,015	35		0	0	
Irrevocable facilities	7,504	120		-1	-1	
Total	13,550	156	0	-1	-1	0

Movements in allowances and provisions for expected credit losses

The following table shows the movements in allowances for expected credit losses for financial assets and the provision for expected credit losses for off-balance sheet commitments.

	2019					
	OPENING BALANCE	INCREASES DUE TO ORIGINA- TION AND ACQUISI- TION	DECREASE DUE TO DERECOG- NITION REPAY- MENTS AND DISPOSALS	CHANGES DUE TO CHANGE IN CREDIT RISK (NET)	DECREASE IN ALLOW- ANCE ACCOUNT	CLOSING BALANCE
Allowances						
Cash and balances held with central banks	-	-	-	-	-	0
Amounts due from banks	0	0	0	0	-	0
Financial assets at fair value through OCI	1	0	0	0	-	1
Interest-bearing securities at amortised cost	7	0	-2	1	-	6
Loans and advances	47	5	-3	149	-5	193
	55	5	-5	150	-5	200
Provision						
Off-balance sheet commitments	2	1	-1	3	-	5

	2018					
	INCREASES DUE TO ORIGINATION	DUE TO DERECOGNITION REPAYMENTS	CHANGES DUE TO REPAYMENTS	IN ALLOWANCE CHANGE IN CREDIT RISK	DECREASE IN ACCOUNT DUE TO (NET)	CLOSING BALANCE WRITE-OFFS
	OPENING BALANCE	AND ACQUISITION	AND DISPOSALS	(NET)	DECREASE DUE TO DISPOSALS	CLOSING BALANCE
Allowances						
Cash and balances held with central banks	-	-	-	-	-	0
Amounts due from banks	0	0	0	0	-	0
Financial assets at fair value through OCI	1	0	0	0	-	1
Interest-bearing securities at amortised cost	13	2	-1	1	-8	7
Loans and advances	50	8	-13	2	-	47
	64	10	-14	3	-8	55
Provision						
Off-balance sheet commitments	2	2	-2	0	-	2

Modifications of contractual cash flows

There have been no financial assets for which the contractual cash flows have been modified during 2019 while they had a loss allowance measured at an amount equal to lifetime expected credit loss (i.e. stage 2 or 3). No financial assets which were modified in previous reporting periods while they had a loss allowance measured at an amount equal to lifetime expected credit loss (stage 2 or 3) have been moved back to stage 1 during 2019.

Key inputs and assumptions

The Expected Credit Loss of the financial asset is measured on either a 12-month or lifetime basis depending on whether a significant increase in credit risk has occurred. The total Expected Credit Loss is a discounted product of the Probability of Default (PD), Loss Given Default (LGD) and Exposure At Default (EAD).

Probability of default

PDs are used as a key component in the determination of ECLs and SICR. BNG Bank has developed PD-models, largely based on expert judgements, for exposures for which no external rating is available. To ensure IFRS 9 compliance and so-called 'point-in-time' PDs, the bank developed overlay models that include forward-looking information (FLI). For staging purposes, credit ratings are used which are adjusted for forward-looking information. BNG Bank applies three internally developed scenarios based on economic forecasts which are consistent with inputs to other relevant estimates within the financial statements. The proposed macroeconomic forecasts are benchmarked with an external macroeconomic forecast to ensure the external validity of the scenarios. The scenarios are approved in the Asset and Liability Committee (ALCO). In doing so, BNG Bank ensures that the PDs are reasonable and supportable. In the course of 2019, all the Probability of Default (PD) models were validated by an external party. The bank continuously enhances its PD models in line

with the relevant rules and regulations. Due to low credit risk for the bank, the credit risk assessment framework for zero-risk-weighted lending is limited. This framework was extended in 2019. In order to comply with current and future regulations as well as meeting supervisory expectations, further extensions will be necessary.

Loss given default

Because of its low default credit portfolio and the lack of historical internal LGD data, BNG Bank is not able to create LGD models. Therefore, BNG Bank applies a basic flat LGD approach, with four different LGD percentages for its entire exposure:

- 0% for exposures granted to or guaranteed by (Dutch) central or regional governments;
- 10% for government bonds issued by central or regional governments in the EU;
- 35% for exposure without a guarantee of a central or regional government and senior unsecured bonds; and
- 75% for subordinated loans.

Exposure at default

The EAD for loans and for interest-bearing securities (excluding securitisations) is based on contractual repayments owed by the obligor over a 12-month or lifetime period. Voluntary repayments or early redemptions are not taken into account, as these are historically infrequent. For securitisations, the future contractual repayments are based on estimated Constant Prepayment Rates which are derived from external sources. In case of committed (off-balance sheet) facilities, the maximum exposure is adjusted in order to reflect the expected drawdown behaviour for either a 12-month or lifetime period (in accordance with the impairment stage).

Significant increase in credit risk

BNG Bank applies the Point-in-Time PD, which is adjusted for forward-looking information, as an input parameter for the assessment of significant changes in credit risk since recognition. In addition, the bank uses forbearance measures as well as a 30-day past-due period as backstop criteria to determine a significant increase in credit risk. On the other hand, the bank also applies a low credit risk exemption for monitoring significant changes in credit risk since recognition. In this case, an impairment is measured using the 12-month ECL, without determining if a significant increase in credit risk has occurred. BNG Bank will consider financial assets with an investment grade rating to be of 'low credit risk'. For bonds, BNG Bank considers a BBB- or higher to be an investment grade. With regards to loans, the bank uses its internal counterparty credit rating to determine whether it is investment grade. Internal counterparty credit ratings are derived from a number of market sector specific internal rating models, which have been externally validated.

BNG Bank applies an expert judgement approach when determining the stage 3 impairment figures. The approach is performed on an instrument level by the Special Management department.

Forward-looking macroeconomic information

Historical analysis are performed to identify the key macroeconomic variables, which are provided by the bank's economist on a quarterly basis. Expert judgement is applied. The macroeconomic factors applied in determining the probability of default for non-

securitisations are the nominal GDP, the unemployment rate, and the wage rate. For securitisations the applied macroeconomic factors are the house price index, the long term interest rate, and debt.

Non-securitisations		WEIGHTING AS AT 31/12/2019		
Macro economic variable		HORIZON	SCENARIO	
Gross Domestic Product (GDP) for The Netherlands		3 years	Base scenario	70%
Unemployment rate for The Netherlands		3 years	Upward scenario	10%
Wage growth rate		3 years	Downward scenario	20%

Securitisations		WEIGHTING AS AT 31/12/2019		
Macro economic variable		HORIZON	SCENARIO	
House price indices in the Euro area (17 countries)		3 years	Base scenario	65%
Long-term interest rates in the Euro area (19 countries)		3 years	Upward scenario	10%
Debt (Credit to households and NPISHs) in the Euro area ¹		3 years	Downward scenario	25%

¹ Non-profit institutions serving households

Non-performing and/or credit-impaired exposures

BNG Bank applies the following criteria to designate exposures as non-performing or credit-impaired:

- BNG Bank considers that the obligor is unlikely to pay its credit obligations to the bank; and
- The obligor is past due 90 days or more on any material credit obligation to the bank.

The bank employs the following indicators for 'Unlikeliness to pay':

- The obligor's source of income is considered insufficient to meet its payment obligations;
- There are indications that future cash flows are under pressure;
- The obligor's debt ratio has increased significantly;
- One or more covenants have been breached;
- BNG Bank has called upon a guarantee or seized collateral;
- Significant delayed payments to other creditors (recorded in a register);
- There is a crisis in the obligor's market sector, in which the obligor is considered to be a weak party;
- The obligor can no longer be active in its market sector as a result of its financial difficulties; and
- Another creditor has filed for the obligor's bankruptcy.

Sensitivity analysis of credit loss allowances

In order to measure the sensitivity of the credit loss allowances to changes in the input factors, three different scenarios are used to (re)calculate the size of the credit loss allowances as at 31 December 2019.

Scenario A:

In scenario A, the credit rating of all individual exposures subject to impairment are downgraded by 1 notch (e.g. from AAA to AA+). These (lower) credit ratings, as well as the accompanying PDs, are then applied in the staging assessment and the calculation of the credit loss allowances. As a result, a portion of the exposures migrated from stage 1 to stage 2. The EADs and LGDs are unchanged compared with the base line calculation.

Scenario B:

In scenario B, the exposures which normally have an LGD of 0% are assigned a 10% LGD. The LGD of exposures that are normally assigned a 10%, 35% or 75% LGD remain unchanged. The EADs, credit ratings and PDs are also unchanged compared with the base line calculation.

Scenario C:

In scenario C, the calculation of the credit loss allowances is performed using 'Through-the-Cycle' PDs rather than Point-in-Time PDs. In other words, PDs without incorporation of forward-looking macroeconomic information are used in the calculation. The EADs, credit ratings, stage levels and LGDs are unchanged compared with the base line calculation.

The following table shows the sensitivity (in millions of euros) of the total credit loss allowances in the 3 different scenarios.

		31/12/2019		
	ACTUAL BALANCE	SCENARIO A (1 NOTCH DOWN)	SCENARIO B (LGD FROM 0% TO 10%)	SCENARIO C (THROUGH-THE- CYCLE PDs)
Allowances				
Cash and balances held with central banks	-	-	0	-
Amounts due from banks	0	0	0	0
Financial assets at fair value through OCI	1	1	1	1
Interest-bearing securities at amortised cost	6	6	7	4
Loans and advances	193	214	216	204
	200	221	224	209
Provision				
Off-balance sheet commitments	5	8	6	8

	31/12/2018		
	ACTUAL BALANCE	SCENARIO A (LGD FROM 0% TO (1 NOTCH DOWN)	SCENARIO B (10%)
			SCENARIO C (THROUGH-THE- CYCLE PDS)
Allowances			
Cash and balances held with central banks	-	-	0
Amounts due from banks	0	0	0
Financial assets at fair value through OCI	1	1	1
Interest-bearing securities at amortised cost	7	9	7
Loans and advances	47	56	68
	55	66	76
Provision			
Off-balance sheet commitments	2	3	3
			4

Hedging of risks with derivatives

BNG Bank applies economic hedging in order to mitigate foreign exchange risks and keep interest rate risks at a desired level. To this end, the bank has put in place a system of limits and procedures that is strictly adhered to and is monitored on a daily basis. Foreign exchange and interest rate risks are hedged with derivatives. The treatment of derivatives and hedged items in the balance sheet and income statement is such that they are aligned as much as possible with the actual economic hedging. For accounting purposes, BNG Bank processes this hedging relationship under IFRS by applying micro and portfolio fair value hedging, as well as cash flow hedging. The Accounting principles for the consolidated financial statements section describes the conditions that need to be met before these forms of hedge accounting can be applied.

Micro fair value hedge accounting (MH) is applied to individual transactions involved in an economic hedge relationship to offset interest rate risks and foreign exchange risks when applicable. Foreign exchange risks include the foreign exchange risks on credit spread. This form of hedging is applied to nearly all debt securities issued. The foreign exchange risks and interest rate risks are hedged by means of derivatives, mainly (cross-currency) interest rate swaps. The issues are fully offset against the derivatives so that, on a net basis, the fixed coupons of the issues are converted into variable interest amounts in euros. Both the issues and the accompanying derivatives can contain structures, such as options, which are also fully offset. The revaluation effect of hedged MH transactions with regard to fair value hedging is accounted for in the same balance sheet item as the hedged items.

BNG Bank applies (micro) cash flow hedge accounting to virtually all long-term funding transactions in foreign currencies with a floating coupon in order to protect the bank's result against possible variability in future cash flows due to exchange rate fluctuations.

The bank also applies cash flow hedge accounting to hedge the foreign currency risk of the credit spread of fixed foreign currency transactions. With the exception of voluntary early redemption of funding in foreign currencies or an immediate and complete withdrawal from the banking business, there are no circumstances under which these revaluations can lead to a realised result.

The basis swap spread is an important building block of the value of a cross-currency (interest rate) swap. The fluctuations of the basis spread can never be part of the hedge relationship. If micro hedging is applied the fluctuations of the basis spread are separated as 'cost of hedging' reserve within equity.

In portfolio fair value hedge accounting (PH), the interest rate risks of a group of transactions in euro are hedged by means of a group of derivatives. The hedging relationship is constructed and controlled at an aggregate level, thus precluding relationships with individual transactions. Within BNG Bank, portfolio hedging, like micro hedging, has been highly effective. Any ineffectiveness that occurs is recognised in the income statement.

The effective part of PH is accounted for in the balance sheet item Value adjustments on loans in portfolio hedge accounting.

Although BNG Bank uses derivatives for economic hedging purposes, it is not possible in all cases to include these in a hedge accounting relationship, as permitted by IFRS. Virtually all derivatives that are not involved in a hedge accounting relationship are hedged economically with a financial instrument which is also recognised at fair value through the income statement. Consequently, in total, the volatility of the result due to interest rate and foreign exchange risks is limited.

The following table shows the maturity profile as at 31 December 2019 of all derivatives based on their notional amounts.

	31/12/2019				31/12/2018			
	UP TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	TOTAL	UP TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	TOTAL
	Derivatives involved in portfolio hedge accounting				Derivatives involved in micro hedge accounting			
Interest rate swaps	4,305	23,813	69,303	97,421	7,308	21,547	60,285	89,140
Derivatives involved in micro hedge accounting								
Interest rate swaps	5,947	20,832	30,825	57,604	5,006	18,789	22,235	46,030
Cross-currency swaps	10,377	25,785	8,808	44,970	9,849	26,357	8,366	44,572
Derivatives not involved in hedge accounting								
Interest rate swaps	1,561	680	693	2,934	114	2,224	771	3,109
Cross-currency swaps	2,014	210	786	3,010	-	180	866	1,046
FX-swaps	8,878	-	-	8,878	7,310	-	-	7,310
Other derivatives	1,160	395	682	2,237	100	1,549	734	2,383
Total	34,242	71,715	111,097	217,054	29,687	70,646	93,257	193,590

The following table shows the total notional amounts of the derivatives in relation to the fair value.

	31/12/2019		31/12/2018	
	NOTIONAL AMOUNT	FAIR VALUE	NOTIONAL AMOUNT	FAIR VALUE
Derivatives involved in portfolio hedge accounting				
Interest rate swaps	24,609	2,636	22,637	2,853
Derivatives involved in micro hedge accounting				
Interest rate swaps	38,916	2,912	38,802	2,199
Cross-currency swaps	33,340	3,961	25,626	3,050
Derivatives not involved in hedge accounting				
Interest rate swaps	2,016	39	2,209	51
Cross-currency swaps	542	180	568	172
FX-swaps	5,633	89	3,310	54
Other derivatives	102	16	121	11
Total derivatives stated as assets	105,158	9,833	93,273	8,390
Derivatives involved in portfolio hedge accounting				
Interest rate swaps	72,812	20,660	66,504	15,587
Derivatives involved in micro hedge accounting				
Interest rate swaps	18,688	161	7,229	939
Cross-currency swaps	11,630	937	18,946	1,879
Derivatives not involved in hedge accounting				
Interest rate swaps	918	360	898	327
Cross-currency swaps	2,468	427	478	325
FX-swaps	3,245	26	4,000	21
Other derivatives	2,135	190	2,262	145
Total derivatives stated as liabilities	111,896	22,761	100,317	19,223

BNG Bank receives collateral from counterparties with respect to credit risk on derivatives. As at 31 December 2019, this collateral amounted to EUR 1,137 million (2018: EUR 414 million), all in cash.

With regard to derivatives, BNG Bank provided EUR 15,828 million in collateral in 2019 (2018: EUR 12,500 million), of which EUR 14,933 million in cash (2018: EUR 12,038 million) and EUR 895 million in interest-bearing securities (2018: EUR 462 million).

Fair value hedge accounting

The following table shows the changes in fair value of the hedged items and the hedging instruments due to fair value hedge accounting in the reporting period, used as the basis for recognising ineffectiveness.

	31/12/2019				
	ACCUMULATED AMOUNT OF FAIR VALUE				
	GROSS CARRYING AMOUNT OF HEDGED ITEMS	ADJUSTMENTS ON THE HEDGED ITEMS OR THROUGH OCI	GAIN/ LOSSES GAIN/ LOSSES ATTRIBUTABLE TO THE HEDGED ITEM	GAIN/ LOSSES ATTRIBUTABLE TO THE HEDGING INSTRUMENT	GAIN/ LOSSES ATTRIBUTABLE TO THE HEDGING INSTRUMENT
Fair value hedges					
Micro fair value hedges (hedged items stated as assets)					
Fixed rate bonds in Financial assets at FVOCI	8,061	568	110	-94	16
Fixed rate bonds in Interest-bearing securities at AC	1,119	82	63	-65	-2
	9,180	650	173	-159	14
Micro fair value hedges (hedged items stated as liabilities)					
Fixed rate loans in Amounts due to banks	-1,952	-64	-31	32	1
Fixed rate bonds in Debt securities	-91,136	-4,127	-2,877	2,905	28
Fixed rate loans in Funds entrusted	-1,534	-13	-53	48	-5
	-94,622	-4,204	-2,961	2,985	24
Total micro fair value hedges	-85,442	-3,554	-2,788	2,826	38
Portfolio fair value hedges (hedged items stated as assets)					
Fixed rate bonds in Financial assets at FVOCI	1,095	172	23	-52	-29
Fixed rate bonds in Interest-bearing securities at AC	1,721	69	21	-21	0
Fixed rate loans in Loans and advances	76,116	16,393	4,926	-4,925	1
Total portfolio fair value hedges	78,932	16,634	4,970	-4,998	-28
Total fair value hedges			2,182	-2,172	10

31/12/2018

	ACCUMULATED AMOUNT OF FAIR VALUE				
	GROSS CARRYING AMOUNT OF HEDGED ITEMS	ADJUSTMENTS ON THE HEDGED ITEMS OR THROUGH OCI	GAIN/ LOSSES GAIN/ LOSSES ATTRIBUTABLE TO THE HEDGED ITEM	GAIN/ LOSSES ATTRIBUTABLE TO THE HEDGING INSTRUMENT	HEDGE INEFFECTIVE- NESS
Fair value hedges					
Micro fair value hedges (hedged items stated as assets)					
Fixed rate bonds in Financial assets at FVOCI	8,573	620	-10	2	-8
Fixed rate bonds in Interest-bearing securities at AC	1,231	58	-20	29	9
	9,804	678	-30	31	1
Micro fair value hedges (hedged items stated as liabilities)					
Fixed rate loans in Amounts due to banks	-545	-4	-7	7	0
Fixed rate bonds in Debt securities	-88,814	-2,318	-958	955	-3
Fixed rate loans in Funds entrusted	-1,564	3	-72	72	0
	-90,378	-2,315	-1,030	1,027	-3
Total micro fair value hedges	-80,574	-1,637	-1,060	1,058	-2
Portfolio fair value hedges (hedged items stated as assets)					
Fixed rate bonds in Financial assets at FVOCI	1,025	167	-2	0	-2
Fixed rate bonds in Interest-bearing securities at AC	1,508	18	0	0	0
Fixed rate loans in Loans and advances	72,361	11,548	11	9	20
Total portfolio fair value hedges	74,894	11,733	9	9	18
Total fair value hedges			-1,051	1,067	16

Cash flow hedge accounting

The following table shows the notional amount and the changes in fair value of the hedging instruments, as well as the gross carrying amounts of the hedged items involved in micro cash flow hedge accounting in the reporting period, used as the basis for recognising ineffectiveness.

							31/12/2019	
	GROSS CARRYING AMOUNT OF HEDGED ITEMS		CHANGES IN FAIR VALUE OF HEDGING INSTRUMENTS USED FOR MEASURING HEDGE INEFFECTIVENESS			RECLASSIFIED AS INTEREST RESULT CALCULATED USING THE EFFECTIVE INTEREST METHOD		
	NOTIONAL AMOUNT OF HEDGING INSTRUMENTS	ASSETS	LIABILITIES	EFFECTIVE PORTION RECOGNISED IN OCI	HEDGE INEFFECTIVENESS RECOGNISED IN PROFIT OR LOSS			
Cash flow hedges								
Micro cash flow hedges								
Cross currency swaps		4,056	35	-3,899	14	-3	14	
Total cash flow hedges		4,056	35	-3,899	14	-3	14	

							31/12/2018	
	GROSS CARRYING AMOUNT OF HEDGED ITEMS		CHANGES IN FAIR VALUE OF HEDGING INSTRUMENTS USED FOR MEASURING HEDGE INEFFECTIVENESS			RECLASSIFIED AS INTEREST RESULT CALCULATED USING THE EFFECTIVE INTEREST METHOD		
	NOTIONAL AMOUNT OF HEDGING INSTRUMENTS	ASSETS	LIABILITIES	EFFECTIVE PORTION RECOGNISED IN OCI	HEDGE INEFFECTIVENESS RECOGNISED IN PROFIT OR LOSS			
Cash flow hedges								
Micro cash flow hedges								
Cross currency swaps		2,633	51	-2,643	13	-2	5	
Total cash flow hedges		2,633	51	-2,643	13	-2	5	

The following table shows the weighted average FX rates for the major currencies of the final exchange of cross-currency swaps involved in a micro cash flow hedge accounting relationship as at 31 December 2019.

FX rate	31/12/2019			
	UP TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	TOTAL
USD to EUR	0.86236	0.85544	0.80130	0.85159
GBP to EUR	-	1.19947	1.41143	1.27521
AUD to EUR	0.73000	0.72159	0.65528	0.67352
CHF to EUR	0.67701	0.80648	0.66192	0.70652

FX rate	31/12/2018			
	UP TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	TOTAL
USD to EUR	0.86988	0.84505	0.80223	0.84597
GBP to EUR	1.36866	1.22312	1.29477	1.28522

Fair value of financial instruments

The fair value is the transfer price (not adjusted for transaction costs) which, regardless of the intention or capability, would be received if an asset was sold or the price which would be paid if a liability was transferred in an orderly transaction between market participants at the measurement date under the current market conditions. The assumption is that the valuation is viewed from the perspective of market participants, whereby only the specific characteristics and limitations of the financial instrument are taken into consideration. A distinction is made between three levels of fair value, with the nature of the input factors and their significance for the total valuation being decisive for the correct classification in the hierarchy.

Fair value hierarchy

- Level 1: valuation based on (unadjusted) quoted market prices of the instrument itself or, if unavailable, of identical instruments, in an active market. A financial instrument is regarded as quoted in an active market if the quoted price is regularly available, and if these prices reflect current and regularly occurring arm's length market transactions. The quoted market prices for financial assets and liabilities are based on mid-market prices.
- Level 2: valuation based on a valuation technique using directly/indirectly observable market data other than quoted market prices as used at Level 1. This category includes instruments with a valuation that uses quoted prices in an active market for comparable instruments, quoted prices for identical or comparable instruments in markets deemed to be less than active or other valuation techniques whereby all significant input variables are directly or indirectly observable from market data.
- Level 3: valuation based on valuation techniques that make significant use of input data which are not publicly observable in the market. This category includes instruments with a valuation technique that uses input variables that are not based on observable market data and whereby the non-observable market data significantly influence the valuation of the instrument. This category also includes the instruments valued in accordance with the quoted prices for comparable instruments, whereby significant not publicly observable changes or presumptions are necessary for expressing the differences between the instruments.

Where possible, BNG Bank uses quoted market prices (Level 1). Quoted market prices are based on bid prices (for financial assets) and ask prices (for financial liabilities). Using mid-market prices is permitted if the market risk of the financial assets and liabilities is offset. BNG Bank uses mid-market prices on the reporting date for valuation purposes.

In many cases, the bank is reliant on theoretical valuations (Level 2) in respect of its position with debtors. In such cases, the fair value is determined on the basis of valuation models and techniques that are customarily used in the financial sector. These are mostly models based on net present value calculations and option pricing models. The input for these models is based on direct or indirect objectively observable input data such as market prices, forward pricing, market-based yield curves for discounting, correlations, volatilities, cross-currency basis spreads, counterparty creditworthiness and other factors, estimates and assumptions which market parties would use to determine the price. The bank uses so-called spread curves to determine the fair value of financial instruments that involve credit and liquidity risk and for which a theoretical valuation is required. These spread curves are constructed on the basis of the relevant interest rate curve and a spread for credit and liquidity risk. The credit risk spread is dependent on the creditworthiness of the debtor, taking into account the collateral received, guarantees and maturities. The liquidity risk spread depends on the degree of marketability of the instrument. The risk profiles of individual clients and financial instruments are assessed at least once per quarter. If necessary, the credit-risk spread will be adjusted.

In a limited number of cases, the valuation of the bank's financial instruments is based to a significant extent on input data and management estimates which are not publicly observable in the market (Level 3).

In determining the fair value of derivative transactions, a credit value adjustment (CVA) and a debit valuation adjustment (DVA) are applied to all derivative transactions with all clients and financial counterparties with which the bank does not have an agreement for the daily exchange of collateral. CVA and DVA are also applied to all derivative transactions with clients or counterparties with which the bank has an agreement for the daily exchange of collateral but where significant thresholds are applicable in determining the collateral amount.

The bank applies a spread over the relevant swap curve to determine its own credit risk: the 'own credit adjustment (OCA)'. The OCA only relates to instruments included under Financial liabilities at fair value through the income statement.

Insofar as financial instruments have the character of a forward contract, official forward prices are used, including forward yield curves and forward exchange rates. In the case of complex instruments, the constituent parts of the instrument are measured separately on the basis of the above techniques and models. The fair value of the entire instrument is determined as the sum of the fair values of its constituent parts. BNG Bank applies only recurring fair values, which are measured on an ongoing basis for processing in the financial position at the end of each reporting period.

	31/12/2019		31/12/2018	
	BALANCE SHEET-VALUE	FAIR VALUE	BALANCE SHEET-VALUE	FAIR VALUE
Cash and balances held with central banks	1,272	1,272	1,587	1,587
Amounts due from banks	66	66	82	83
Cash collateral posted	14,643	14,643	12,043	12,043
Financial assets at fair value through the income statement	1,764	1,764	1,606	1,606
Derivatives	10,004	10,004	8,390	8,390
Financial assets at fair value through other comprehensive income	9,222	9,222	9,648	9,648
Interest-bearing securities at amortised cost	7,764	7,897	7,406	7,422
Loans and advances	88,279	106,012	85,034	98,036
Total financial assets	133,014	150,880	125,796	138,815
Amounts due to banks	1,933	1,928	2,383	2,377
Cash collateral received	1,137	1,137	419	419
Financial assets at fair value through the income statement	674	674	762	762
Derivatives	22,651	22,651	19,223	19,223
Debt securities	112,661	113,466	103,722	104,560
Funds entrusted	5,575	5,759	5,800	6,002
Subordinated debt	33	45	32	45
Total financial liabilities	144,664	145,660	132,341	133,388

When effecting a transaction, the fair value hierarchy is determined on the basis of the relevant characteristics of the valuation, with the nature of the input factors and their significance for the total valuation being decisive for the classification. The classification takes place on the basis of the lowest input level that is significant for the fair value in the transaction as a whole. Significance is assessed by determining the influence of nonobservable input factors on the outcome of the total valuation, with due regard for the range of possible alternative assumptions concerning those non-observable input factors. Each quarter, the classification of each transaction is assessed and adjusted where necessary.

The following table provides an overview of the fair value hierarchy for transactions recognised at fair value.

Financial assets at fair value through the income statement			
Derivatives	102	1,221	441
Financial assets at fair value through other comprehensive income	-	9,999	5
Total financial assets			
	9,141	81	-
	9,243	11,301	446
20,990			
Financial liabilities at fair value through the income statement			
Derivatives	113	561	-
Total financial liabilities			
	-	22,647	4
	113	23,208	4
23,325			

	31/12/2019		
	LEVEL 1	LEVEL 2	LEVEL 3
Financial assets at fair value through the income statement	89	1,147	370
Derivatives	-	8,382	8
Financial assets at fair value through other comprehensive income	9,566	82	-
Total financial assets			
	9,655	9,611	378
19,644			
Financial liabilities at fair value through the income statement	98	664	-
Derivatives	-	19,215	8
Total financial liabilities			
	98	19,879	8
19,985			

Significant movements in fair value level 3 items

	2019		
	FINANCIAL ASSETS AT FAIR VALUE THROUGH THE INCOME STATEMENT	DERIVATIVES (STATED AS ASSETS)	DERIVATIVES (STATED AS LIABILITIES)
Opening balance	370	8	8
Results through the income statement:			
- Interest result	9	7	7
- Unrealised result on financial transactions	71	-6	-7
- Realised result on financial transactions	-	-	-
	80	1	0
- Unrealised value adjustments via the revaluation reserve			
- Investments			
- Cash flows		-9	-4
			-4
Closing balance	441	5	4
 2018			
	FINANCIAL ASSETS AT FAIR VALUE THROUGH THE INCOME STATEMENT	DERIVATIVES (STATED AS ASSETS)	DERIVATIVES (STATED AS LIABILITIES)
Opening balance IAS 39	623	13	13
Impact IFRS 9		-256	-
Opening balance IFRS 9	367	13	13
Results through the income statement:			
- Interest result	11	6	6
- Unrealised result on financial transactions	1	-7	-7
- Realised result on financial transactions	-	-	-
	12	-1	-1
- Unrealised value adjustments via the revaluation reserve			
- Investments			
- Cash flows		-9	-4
			-4
Closing balance	370	8	8

The Level 3 items primarily concern structured interest-bearing securities that are rarely traded in the market. Therefore, the observable market data available for similar securities is not fully representative of the current fair value. The fair value of these transactions is determined on the basis of public market data that is adjusted using significant input variables not publicly observable in the market.

Input variables which are not publicly observable in the market

For the purpose of determining the fair value of Level 3 financial assets with an inflationary component and a monoline guarantee, the following input variables not publicly observable in the market are used:

- recovery rates for the relevant debtors (40%) and the relevant monoline insurers (30%); and
- a correlation factor between the debtor and the monoline insurer (20%).

These input variables were estimated by management based on data which is not publicly observable in the market and remained unchanged compared to 2018.

Sensitivity of the fair value of level 3 assets and liabilities measured at fair value to a movement in significant input factors

In the sensitivity analysis, the components interest, inflation, and liquidity and credit spreads are presented in both separate and correlated figures. The following table indicates the sensitivity of Level 3 assets in the event of a separate absolute parallel movement in these significant input factors. Despite the fact that there are no direct dependencies between these input factors, the total sensitivity of the instruments in the event of a simultaneous shift in these three input factors is also presented.

Impact on balance sheet value of a movement in relevant input factors

	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018	
	FINANCIAL ASSETS AT FAIR VALUE THROUGH THE INCOME STATEMENT				DERIVATIVES (STATED AS ASSETS)		DERIVATIVES (STATED AS LIABILITIES)		
	VALUE THROUGH THE INCOME STATEMENT				ASSETS)		LIABILITIES)		TOTAL
Balance sheet value	441	370	5	8	-4		-8	442	370
Interest rate									
+ 10 basis points	-10	-8	-1	-2	0	0	-11	-11	-10
- 10 basis points	10	8	1	2	0	0	11	11	10
+ 100 basis points	-84	-68	-25	-20	3	3	-106	-106	-85
- 100 basis points	115	92	8	21	-1	-4	122	122	109
Inflation rate									
+ 10 basis points	10	8	0	0	0	0	10	10	8
- 10 basis points	-9	-8	0	0	0	0	-9	-9	-8
+ 100 basis points	110	89	0	0	0	0	110	110	89
- 100 basis points	-82	-66	0	0	0	0	-82	-82	-66
Credit and liquidity risk spreads									
+ 10 basis points	-10	-8	0	1	0	1	-10	-10	-6
- 10 basis points	10	8	0	-1	0	-2	10	10	5
+ 100 basis points	-85	-69	20	16	5	4	-60	-60	-49
- 100 basis points	116	93	-1	-2	-7	-19	108	108	72
Total significant input factors									
+ 10 basis points	-10	-8	-1	-1	1	1	-10	-10	-8
- 10 basis points	10	8	1	2	-1	-2	10	10	8
+ 100 basis points	-87	-70	-6	-4	5	4	-88	-88	-70
- 100 basis points	121	97	7	19	-7	-19	121	121	97

BNG Bank hedges nearly all its interest rate risks through swaps. The fair value adjustments to interest-bearing securities arising from a change in the interest curve alone therefore, on balance, have a limited impact on the bank's result and equity. By the end of the maturity of the assets and the associated swaps, these changes in market value will approach zero, given that all parties have met their payment obligations. On the other hand, interest rate shifts caused by a change in credit or liquidity risk spreads do have a direct impact on the result and the equity when a financial instrument is measured at fair value.

The major part of the assets in Level 3 (EUR 431 (2018: EUR 360 million)) consists of so-called inflationlinked bonds, where the foreign currency risk, interest rate risk and inflation risk have been hedged using swaps. The default risk of these transactions is insured upon purchase

through a guarantee issued by a so-called monoline insurer. If the value of such guarantees were set at zero, this would have had an unrealised negative effect on the result on financial transactions of EUR 46 million at year-end 2019 (year-end 2018: EUR 78 million negative). The sensitivity of these instruments in the Financial assets at fair value through the income statement item decreased in 2019. Also a subordinated loan is classified ad level 3 since implementation of IFRS 9. The credit spread of this assets is the main unobservable parameter. A movement of the credit spread by +100 basis points has an impact of EUR 1 million negative.

The Derivatives (stated as liabilities) item features a Level 3 separated option linked to the French government interest rate. This option is hedged with a Level 3 swap including an option recognised under the Derivatives (stated as assets) item. The swap is sensitive to the euro swap rate and the French government interest rate and also to counterparty risk. The credit and liquidity spreads decreased during 2019.

Fair value hierarchy of amortised cost transactions

The table below provides an overview of the way in which the fair value is determined for transactions recognised at amortised cost in the balance sheet on the basis of the hierarchical classification referred to above.

	31/12/2019			
	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Cash and balances held with central banks	1,272	-	-	1,272
Amounts due from banks	4	55	7	66
Cash collateral posted	-	14,643	-	14,643
Interest-bearing securities at amortised cost	203	7,404	290	7,897
Loans and advances	1,079	96,625	8,308	106,012
Total financial assets	2,558	118,727	8,605	129,890
Amounts due to banks	-	1,928	-	1,928
Cash collateral received	-	1,137	-	1,137
Debt securities	89,385	22,922	1,159	113,466
Funds entrusted	2,433	-	3,326	5,759
Subordinated debt	-		45	45
Total financial liabilities	91,818	25,987	4,530	122,335

	31/12/2018			
	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Cash and balances held with central banks	1,587	-	-	1,587
Amounts due from banks	4	72	7	83
Cash collateral posted	-	12,043	-	12,043
Interest-bearing securities at amortised cost	246	6,856	320	7,422
Loans and advances	1,270	89,236	7,530	98,036
Total financial assets	3,107	108,207	7,857	119,171
Amounts due to banks	-	2,377	-	2,377
Cash collateral received	-	419	-	419
Debt securities	85,520	17,878	1,162	104,560
Funds entrusted	2,193	-	3,809	6,002
Subordinated debt	-	-	45	45
Total financial liabilities	87,713	20,674	5,016	113,403

The financial assets at amortised cost under Level 3 mainly relate to loans and advances subject to solvency requirements to BNG Bank's statutory market parties. Loans and advances to statutory counterparties under government guarantees are included in Level 2, on account of the strong correlation with bonds issued by the Dutch State. The financial liabilities at amortised cost under Level 1 mainly consist of tradable benchmark bonds issued by BNG Bank (Debt securities item). Funds entrusted are classified under Level 1 and 3 (Debt securities and Funds entrusted item).

Risk section

Institutional risk management approach

The process of accepting and controlling risks is inherent to the day-to-day operations of any bank. In order to conduct its operations, a bank must accept a certain amount of credit, market, liquidity and operational risk. This section provides an overview of the main characteristics of the risk profile of BNG Bank and only covers the risk management practices that directly impact the financial statements.

Credit risk

Credit risk

Credit risk is defined as the risk of losses in earnings or capital resulting from the potential risk that a borrower or a counterparty will fail to meet its obligations in accordance with agreed terms. It includes counterparty risk, settlement risk and concentration risk.

Total credit risk exposure

The total gross exposure value for credit risk consists of the total balance sheet value of the assets, adjusted for the balance sheet value of derivatives, cash collateral posted for either derivative transactions or secured financing transactions and receivables related to Settle to Market (STM) derivative contracts under the Amounts due from banks item. The gross exposure value for off-balance sheet commitments is included, as well as the exposure value for counterparty credit risk (divided into derivative and secured financing transactions). The table below provides insight into the total gross credit risk exposure value.

	31/12/2019	31/12/2018
Balance sheet total	149,689	137,509
-/- Derivatives	-10,004	-8,390
-/- Cash collateral posted	-14,643	-12,043
Total on-balance sheet exposure	125,042	117,076
Total off-balance sheet exposure	10,975	13,706
Exposure value for derivatives	3,664	3,057
Exposure value for secured financing transactions	49	7
Total counterparty credit risk exposure	3,713	3,064
Total gross exposure	139,730	133,846

As at 31 December 2019, the balance sheet value of the loans granted to or guaranteed by public authorities, the WSW Housing guarantee fund and the WfZ Healthcare guarantee fund in the Loans and advances balance sheet item totalled EUR 80.3 billion (2018: EUR 77.7 billion). The contingent liabilities and the irrevocable facilities are explained in

the section 'Off-balance sheet commitments'. Section 'Encumbered financial assets and liabilities' indicates which parts of the financial assets are not freely disposable.

The calculation of the market value of financial assets and financial liabilities at fair value through the income statement includes a credit and liquidity risk spread. Changes in value due to credit-risk and liquidity-risk fluctuations are derived from changes in these spreads. The risk profiles of individual customers and financial instruments are periodically assessed. If necessary, the credit-risk spread is adjusted for the purpose of valuation.

Cumulative changes in the market value of financial assets at fair value through the income statement as a result of adjusted credit and liquidity risk spreads totalled EUR 259 million negative (2018: EUR 288 million negative) and amounted to EUR 29 million positive over 2019 (2018: EUR 9 million positive). Cumulative changes in the market value of financial liabilities at fair value through the income statement as a result of adjusted credit and liquidity risk spreads totalled EUR 10 million positive (2018: EUR 11 million positive) and amounted to EUR 0.9 million negative for 2019 (2018: EUR 0.5 million negative). Financial liabilities at fair value through the income statement are recognised on the relevant funding curve including a mark-up for 'own credit risk' in the accounts.

Counterparty risk

The bank is exposed to counterparty risk in relation to public sector entities (loans and advances), financial counterparties (derivatives) and issuers of interest-bearing securities (IBS) in which the bank has invested. BNG Bank applies the following credit risk mitigation measures:

- Guarantees received from a central or local authority or by the guarantee funds WSW (Social Housing) and WfZ (Healthcare). Because loans subject to solvency requirements are often extended under partial or full guarantees or suretyships, the loan remains partly or fully zero-risk-weighted on balance for BNG Bank (see the section on statutory market parties).
- Other forms of security such as pledges and mortgages are used to minimise possible losses due to credit risks. The potential risk-reducing effect, however, is not used in the calculation of the regulatory capital requirement.
- Bilateral netting and collateral agreements based on a daily collateral exchange with financial counterparties, also the section on financial counterparties.

Statutory market parties

The bank's Articles of Association restrict lending to parties subject to some form of government involvement. As a result, the credit portfolio is largely comprised of zero-risk-weighted loans and advances provided to or guaranteed by the Dutch government.

Lending subject to solvency requirements is preceded by a credit assessment. This contains a detailed assessment of the creditworthiness of the client concerned, based in part on the bank's own internal rating model. Additionally, the bank has an internal risk assessment process for tailored transactions that includes operational risk elements. Moreover, the bank uses extensive qualitative product descriptions, in which the appropriateness of the product for different types of clients is made explicit.

Credit risk models

Most of BNG Bank's clients are not rated by external rating agencies, such as Moody's, Fitch or S&P. The bank applies internally developed rating models to assess creditworthiness of clients. These expert models are sector specific and subject to periodic review and validation in accordance with the bank's model governance policy. These models are not applied for capital calculations under Pillar I, where the bank uses the Standardised approach.

The significance of the internal ratings is the following:

Internal rating	Description
0	Zero risk-weighted lending.
1 through 11	The credit risk is deemed acceptable. A regular annual review is performed.
12 through 13	Watch list: there is an increased credit risk. A review takes place at least twice a year.
14 through 17	Recovery & Restructuring Management: there is an increased credit risk. At least three times a year, a report on these debtors is submitted to the Executive Board.
18 through 19	Recovery & Restructuring Management: there is an increased credit risk and/or the debtor repeatedly fails to fulfil the payment obligations and/or there is no expectation of continuity. At least three times a year, a report on these debtors is submitted to the Executive Board.

Forborne exposures

Forbearance concerns credit agreements for which the credit conditions have been amended in the debtor's favour as a result of the debtor's precarious financial position, so as to enable it to fulfil its obligations.

		31/12/2019		
		OF WHICH: FORBORNE		IN % OF TOTAL
		TOTAL EXPOSURE	GROSS OF IMPAIRMENT	
Financial assets (excl. derivatives)				
Cash and balances held with central banks	1,272	-	-	0.0%
Amounts due from banks	66	-	-	0.0%
Cash collateral posted	14,643	-	-	0.0%
Financial assets at fair value through the income statement	1,764	-	-	0.0%
Financial assets at fair value through other comprehensive income	9,222	-	-	0.0%
Interest-bearing securities at AC	7,764	-	-	0.0%
Loans and advances	88,279	346	320	0.4%
	123,010	346	320	0.3%
Off-balance sheet commitments				
Contingent liabilities	60	-	-	0.0%
Revocable facilities	3,764	5	5	0.1%
Irrevocable facilities	7,151	10	10	0.1%
	10,975	15	15	0.1%

		31/12/2018		
	TOTAL EXPOSURE	OF WHICH: FORBORNE		IN % OF TOTAL
		GROSS OF IMPAIRMENT	NET OF IMPAIRMENT	
Financial assets (excl. derivatives)				
Cash and balances held with central banks	1,587	-	-	0.0%
Amounts due from banks	82	-	-	0.0%
Cash collateral posted	12,043	-	-	0.0%
Financial assets at fair value through the income statement	1,606	-	-	0.0%
Financial assets at fair value through other comprehensive income	9,648	-	-	0.0%
Interest-bearing securities at AC	7,406	-	-	0.0%
Loans and advances	85,034	348	325	0.4%
	117,406	348	325	0.4%
Off-balance sheet commitments				
Contingent liabilities	32	-	-	0.0%
Revocable facilities	6,050	-	-	0.0%
Irrevocable facilities	7,624	-	-	0.0%
	13,706	0	0	0.0%

The financial assets of which contractual terms have been changed as a result of the debtor's unfavourable financial position amounted to EUR 361 million as at 31 December 2019 (year-end 2018: EUR 348 million). The share of forborne exposure in the total portfolio is 0.3% (year-end 2018: 0.3%) and concerns 9 debtors (year-end 2018: 7 debtors). Forbearance is used as a backstop indicator in the impairment staging assessment, as a result of which all forborne exposures are classified in impairment stage 2.

Non-performing and/or credit-impaired exposures

Please refer to Note 37 (Impairment of financial assets and off-balance sheet commitments) for disclosure of BNG Bank's definition of non-performing or credit-impaired exposures. An exposure classified as non-performing or credit-impaired can once again be regarded as performing (i.e. not credit-impaired) if all of the following conditions are met:

- The debtor once again complies with all contractual terms (no default).
- The debtor's situation has improved to the extent that the debtor is able to meet payment obligations according to an existing or adjusted payment profile ('likely to pay'); and
- The debtor has no payment arrears exceeding 90 days.

The tables below provide insight into the total exposure in financial assets (excluding derivatives) and off-balance sheet commitments, indicating which portions have been classified as credit-impaired.

Financial assets (excl. derivatives)				
	TOTAL EXPOSURE	OF WHICH: CREDIT-IMPAIRED		
		GROSS OF IMPAIRMENT	NET OF IMPAIRMENT	
Cash and balances held with central banks	1,272	0	0	0.0%
Amounts due from banks	66	0	0	0.0%
Cash collateral posted	14,643	0	0	0.0%
Financial assets at fair value through the income statement	1,764	0	0	0.0%
Financial assets at fair value through other comprehensive income	9,222	0	0	0.0%
Interest-bearing securities at amortised cost	7,764	0	0	0.0%
Loans and advances	88,279	290	134	0.3%
	123,010	290	134	0.2%
Off-balance sheet commitments				
Contingent liabilities	60	0	0	0.0%
Revocable facilities	3,764	8	8	0.2%
Irrevocable facilities	7,151	23	21	0.3%
	10,975	31	29	0.3%

31/12/2019				
	TOTAL EXPOSURE	OF WHICH: CREDIT-IMPAIRED		
		GROSS OF IMPAIRMENT	NET OF IMPAIRMENT	
Cash and balances held with central banks	1,587	-	-	0.0%
Amounts due from banks	82	-	-	0.0%
Cash collateral posted	12,043	-	-	0.0%
Financial assets at fair value through the income statement	1,606	-	-	0.0%
Financial assets at fair value through other comprehensive income	9,648	-	-	0.0%
Interest-bearing securities at amortised cost	7,406	-	-	0.0%
Loans and advances	85,034	57	41	0.0%
	117,406	57	41	0.0%
Off-balance sheet commitments				
Contingent liabilities	32	-	-	0.0%
Revocable facilities	6,050	-	-	0.0%
Irrevocable facilities	7,624	-	-	0.0%
	13,706	-	-	0.0%

31/12/2018				
	TOTAL EXPOSURE	OF WHICH: CREDIT-IMPAIRED		
		GROSS OF IMPAIRMENT	NET OF IMPAIRMENT	
Cash and balances held with central banks	1,587	-	-	0.0%
Amounts due from banks	82	-	-	0.0%
Cash collateral posted	12,043	-	-	0.0%
Financial assets at fair value through the income statement	1,606	-	-	0.0%
Financial assets at fair value through other comprehensive income	9,648	-	-	0.0%
Interest-bearing securities at amortised cost	7,406	-	-	0.0%
Loans and advances	85,034	57	41	0.0%
	117,406	57	41	0.0%
Off-balance sheet commitments				
Contingent liabilities	32	-	-	0.0%
Revocable facilities	6,050	-	-	0.0%
Irrevocable facilities	7,624	-	-	0.0%
	13,706	-	-	0.0%

Credit-impaired exposure totalled EUR 321 million as at 31 December 2019 (year-end 2018: EUR 57 million). The share of credit-impaired exposure, of which one obligor in particular contributed significantly to the net impairment charge for the year. In the total portfolio increased sharply due to financial problems of two relatively large obligors. However, the total credit-impaired exposure is still low in relation to the total exposure of the portfolio of BNG Bank. At year-end 2019 the share of credit-impaired exposure in the total portfolio is 0.2% (year-end 2018: 0.0%) and concerns 10 debtors (year-end 2018: 9 debtors). BNG Bank has received government guarantees totalling EUR 36 million (2018: EUR 27 million) with respect to credit-impaired exposures.

The following table shows the development of credit-impaired exposures.

	2019	2018
Total credit-impaired exposure as at 1 January	57	52
Increase in existing credit-impaired exposures	0	3
Shift from performing to credit-impaired exposure	301	23
Shift from credit-impaired to performing exposure	-22	-
Repayments on and settlement of credit-impaired exposure	-15	-21
Total credit-impaired exposure as at 31 December	321	57

Maturity analysis of performing past due exposures

The following table comprises past due exposures that are not included in impairment stage 3 under IFRS 9.

	31/12/2019	31/12/2018
Less than 31 days	2	0
31 through 60 days	-	-
61 through 90 days	-	-
Over 90 days	-	-
Closing balance	2	0

Impairments

The impairments of financial assets are explained in note 31.

External rating

BNG Bank uses the external ratings awarded by rating agencies, specifically S&P, Moody's, Fitch and DBRS. In determining the capital requirement, the bank uses the ratings of these four agencies if such ratings are available. The ratings relate either to the counterparty or specifically to a securities purchased.

Financial counterparties

The market risks associated with loans to clients are mitigated primarily through derivative transactions with financial counterparties. The bank only conducts business with financial counterparties that have been rated by an external agency. Financial counterparties are periodically assessed for creditworthiness. If necessary, the limit on the maximum exposure to such a counterparty is re-adjusted accordingly.

	31/12/2019			31/12/2018		
	MTM			MTM		
	VALUE	ADD-ON	TOTAL	VALUE	ADD-ON	TOTAL
Credit equivalents of derivatives on the asset side of the balance sheet						
Interest contracts	1,986	755	2,741	1,433	735	2,168
Currency contracts	23	879	902	13	873	886
Total	2,009	1,634	3,643	1,446	1,608	3,054

At year-end 2019, the risk-weighted credit equivalent of the derivatives portfolio totalled EUR 1,146 million (2018: EUR 1,189 million).

In order to reduce credit risk, netting agreements are in place with financial counterparties with which BNG Bank actively enters into derivatives transactions. In addition, collateral agreements are concluded. These ensure that market value developments are mitigated on a daily basis by collateral. The agreements are updated where necessary in response to changing market circumstances, market practices and regulatory changes. The table on the next page shows the gross positions before balance sheet netting and if the collateral agreements were taken into account.

	31/12/2019			
	DERIVATIVES		NET	
	STATED AS	STATED AS		
ASSETS LIABILITIES				
Netting of financial assets and financial liabilities (derivatives)				
Gross value of financial assets and liabilities before balance sheet netting	12,184	-24,831	-12,647	
Gross value of the financial assets and liabilities to be netted	-2180	2180	0	
Balance sheet value of financial assets and liabilities (after netting)	10,004	-22,651	-12,647	
Value of financial netting instrument that does not comply with IAS 32 (netting of derivatives with the same counterparty) for netting purposes	-7,802	7,802	0	
Exposure before collateral	2,202	-14,849	-12,647	
Value of financial collateral that does not comply with IAS 32 for netting purposes	-1137	14,632	13,495	
Net exposure	1,065	-217	848	

	31/12/2018		
	DERIVATIVES STATED AS ASSETS	DERIVATIVES STATED AS LIABILITIES	NET
Netting of financial assets and financial liabilities (derivatives)			
Gross value of financial assets and liabilities before balance sheet netting	8,801	-19,634	-10,833
Gross value of the financial assets and liabilities to be netted	-411	411	-
Balance sheet value of financial assets and liabilities (after netting)	8,390	-19,223	-10,833
Value of financial netting instrument that does not comply with IAS 32 (netting of derivatives with the same counterparty) for netting purposes	-7,022	7,022	-
Exposure before collateral	1,368	-12,201	-10,833
Value of financial collateral that does not comply with IAS 32 for netting purposes	-414	12,038	11,624
Net exposure	954	-163	791

At year-end 2019, the collateral posted for derivative transactions amounted to EUR 14.9 billion (2018: EUR 12.0 billion). The deterioration of BNG Bank's rating by three notches would increase this amount by EUR 34 million (2018: EUR 10 million). The strength of the bank's liquidity position is sufficient to meet, and to absorb fluctuations in collateral obligations.

Investments in interest-bearing securities (IBS)

BNG Bank's IBS portfolio is held primarily for liquidity management purposes. The portfolio is composed of high-quality bonds, the majority of which are accepted as collateral by the ECB. BNG Bank's total IBS portfolio can be subdivided into a liquidity portfolio and an Asset & Liability Management (ALM) portfolio. The liquidity portfolio consists exclusively of highly negotiable securities and is subdivided according to the various LCR levels. The ALM portfolio is subdivided according to type of security. Each month, the development of the portfolio is reported to and evaluated by the Investment Committee. Using factors such as external ratings and - in part - internal ratings, the bank monitors the development on an individual basis. All assets within these portfolios undergo an impairment analysis twice a year. Asset backed securities (including RMBS) are subject to a due diligence review process.

The amounts shown below per rating category are remaining principal amounts in millions of euros. The total balance sheet value is also shown in the final column.

							31/12/2019
					NON-INVESTMENT GRADE	TOTAL NOMINAL VALUE	TOTAL BALANCE SHEET VALUE
	AAA	AA	A	BBB			
Liquidity portfolio							
Level I - Government/ Supranational	5,351	2,204	220	135	46	7,956	9,125
Level I B - Covered bonds	1,370					1,370	1,428
Level II A - Government/ Supranational		59				59	102
Level II B - Corporates			25			25	25
Level II B - RMBS	1,061					1,061	1,068
	7,782	2,263	245	135	46	10,471	11,748
ALM portfolio							
RMBS	20	295	127		23	465	463
ABS		58	117	28	55	258	254
RMBS-NHG	3,008	89	159			3,256	3,260
Other	473	380	442	260	75	1,630	2,333
	3,501	822	845	288	153	5,609	6,310
Total	11,283	3,085	1,090	423	199	16,080	18,058
							31/12/2018
	AAA	AA	A	BBB	NON-INVESTMENT GRADE	TOTAL NOMINAL VALUE	TOTAL BALANCE SHEET VALUE
Liquidity portfolio							
Level I - Government/ Supranational	5,618	2,290	220	195	46	8,369	9,664
Level I B - Covered bonds	1,121					1,121	1,177
Level II A - Government/ Supranational		56			2	58	91
Level II B - Corporates			25			25	25
Level II B - RMBS	1,488					1,488	1,496
	8,227	2,346	245	195	48	11,061	12,453
ALM portfolio							
RMBS	23	245	275	7	37	587	583
ABS		64	140	30	57	291	288
RMBS-NHG	2285	103	181			2569	2569
Other	376	388	422	256	78	1,520	2,108
	2,684	800	1,018	293	172	4,967	5,548
Total	10,911	3,146	1,263	488	220	16,028	18,001

The liquidity portfolio has increased and improved in quality mainly due to investments in Government bonds with a better rating. The ALM portfolio also increased due to the purchase of high rated NHG securities.

Transfer of financial assets without derecognition

At year-end 2019 and 2018, BNG Bank had transferred no interest-bearing securities in repurchase transactions without derecognition. At year-end 2019, BNG Bank has no financial assets in its portfolio that were transferred and derecognised and in which it has a continuing involvement. Financial assets are not removed from the balance sheet if BNG Bank retains the credit risks and the rights to the underlying cash flows.

Concentration risk

Regarding concentration risk, the bank differentiates between:

- country risk with a distinction between domestic and foreign risk;
- sector risk; and
- risk for individual parties with a distinction between clients and financial counterparties.

Sector specific policies, annual internal targets and maximum exposure amounts on individual counterparties are applied to manage the concentrations risks on sectors and individual parties. A considerable portion of the total outstanding is indirectly related to public sector property. However, these risks are generally mitigated by government guarantees on lending and by the WSW and WfZ guarantee funds. These guarantees result in a concentration risk in relation to public authorities and guarantee funds. The guarantee funds are guaranteed by the central government via backstop constructions. What results on balance is therefore a risk in relation to the Dutch State. The concentration of this risk is high, but inextricably linked to BNG Bank's business model.

The bank is exposed to foreign country risk as a result of transactions with financial counterparties to hedge market risks arising from lending and funding activities, as a result of its liquidity portfolio and, to a limited extent, in the context of lending and investments in the public sector abroad. The bank invests in foreign securities for its liquidity portfolio because the vast majority of its loan portfolio already relates to the Netherlands. Foreign lending is in most cases also directly or indirectly guaranteed by the relevant governments.

All foreign exposures fall within limits set for each country. These limits mainly depend on the perceived credit quality of the country in question. Moreover, a general limit of 15% of the balance sheet total applies to foreign exposures excluding derivatives, collateral and short term loans and current account balances due from banks. Because the creditworthiness of certain countries in the Eurozone deteriorated, the bank has gradually reduced its positions in these countries. This was mainly realised by expiration of exposures.

Long-term foreign exposure

The following tables provide an overview of long-term foreign exposures. Derivative transactions and short-term transactions (including cash collateral with banks in particular) have not been included. The amounts shown are remaining principal amounts in millions of euros.

Supranational institutions
Multilateral development banks
Austria
Belgium
Denmark
Finland
France
Germany
Italy
Portugal
Spain
Switzerland
United Kingdom
United States

	31/12/2019						
	AAA	AA	A	BBB	NON-INVESTMENT GRADE	TOTAL NOMINAL VALUE	TOTAL SHEET BALANCE
Supranational institutions	269	204				473	493
Multilateral development banks	405					405	434
Austria		471				471	521
Belgium		281		136		417	595
Denmark	90					90	91
Finland		486				486	543
France	496	806	100	5		1,407	1,678
Germany	1,453	30	54			1,537	1,815
Italy		19	18	135	60	232	234
Portugal			54	50	100	204	209
Spain	65	276	319		69	729	830
Switzerland			90			90	102
United Kingdom	609	380	301	261	54	1,605	2,291
United States	22					22	23
Total	3,409	2,953	936	587	283	8,168	9,859

Supranational institutions
Multilateral development banks
Austria
Belgium
Denmark
Finland
France
Germany
Italy
Portugal
Spain
Switzerland
United Kingdom
United States

	31/12/2018						
	AAA	AA	A	BBB	NON-INVESTMENT GRADE	TOTAL NOMINAL VALUE	TOTAL SHEET BALANCE
Supranational institutions	369	155				524	543
Multilateral development banks	741					741	802
Austria		554				554	628
Belgium		350		140		490	589
Denmark		90				90	91
Finland		500				500	577
France	473	681	100	5		1,259	1,528
Germany	1,342	30	70			1,442	1,760
Italy		27	25	195	67	314	325
Portugal			89	58	100	247	253
Spain	70	238	443		83	834	925
Switzerland			99			99	113
United Kingdom	636	349	281	273	34	1,573	2,146
United States	22					22	22
Total	3,653	2,974	1,107	671	284	8,689	10,302

The non-investment grade items (i.e. items with a rating below BBB-) mainly consist of exposures in so-called GIIPS countries. This largely concerns interest-bearing securities, including Covered bonds and RMBS transactions. The non-investment grade exposure in France and the United Kingdom concerns a limited number of private project financing schemes in the areas of infrastructure, education, energy and healthcare. The total fair value of foreign non-investment grade exposures in December 2019 amounted to EUR 291 million (year-end 2018: EUR 289 million).

Exposures divided to internal-/external rating

The following table provide an overview of all exposures subdivided to interal and external rating.

Loans and advances solvency-free	31/12/2019			
	ON-BALANCE EXPOSURES (gross carrying amount)			
	PERFORMING	NON-PERFORMING	TOTAL	
STAGE 1	STAGE 2	STAGE 3		
- Low risk	77,997	-	-	77,997
- Medium risk	592	264	-	856
- High risk	194	82	-	276
- Credit-impaired	-	-	36	36
- Not rated	108	544	-	652
Total	78,891	890	36	79,817

Loans and advances subject to capital requirements	31/12/2019			
	ON-BALANCE EXPOSURES (gross carrying amount)			
	PERFORMING	NON-PERFORMING	TOTAL	
STAGE 1	STAGE 2	STAGE 3		
- Low risk	7,581	14	-	7,595
- Medium risk	245	79	-	324
- High risk	5	434	-	439
- Credit-impaired	-	-	254	254
- Not rated	20	23	-	43
Total	7,851	550	254	8,655

Interest-bearing securities	31/12/2019			
	ON-BALANCE EXPOSURES (gross carrying amount)			
	PERFORMING	NON-PERFORMING	TOTAL	
STAGE 1	STAGE 2	STAGE 3	TOTAL	
- Low risk	16,750	28	-	16,778
- Medium risk	81	133	-	214
- High risk	-	-	-	-
- Credit-impaired	-	-	-	-
- Not rated	-	-	-	-
Total	16,831	161	-	16,992

Off-balance sheet exposures	31/12/2019			
	NOTIONAL AMOUNT			
	PERFORMING	NON-PERFORMING	TOTAL	
STAGE 1	STAGE 2	STAGE 3	TOTAL	
- Low risk	10,436	-	-	10,436
- Medium risk	220	31	-	251
- High risk	13	9	-	22
- Credit-impaired	-	-	25	25
- Not rated	48	199	-	247
Total	10,717	239	25	10,981

Risk classes	Ratings based on	
	Internal ratings	External rating
	1 - 11	AAA - BBB
- Low risk	12 - 13	BB
- Medium risk	14 - 17	B or lower
- High risk	18 - 19	
- Credit-impaired		

Individual statutory market parties

For non-zero risk weighted parties, the exposures have to adhere to the Large Exposure Regulation under CRR. The bank has a significantly more conservative approach regarding the maximum size of individual exposures. This further limitation takes into account the degree to which sectors are anchored in the public sector. The party's individual rating is a further criterium for limit setting.

Individual financial counterparties

Transactions with financial counterparties primarily consist of interest rate and currency swaps undertaken to mitigate market risks. BNG Bank sets requirements for the minimum ratings of the financial counterparties with which it is willing to transact, taking into account the nature of the business conducted with that party. This limits the number of available parties. As a consequence, the number of transactions with approved parties is high. Daily exchange of collateral helps to mitigate the credit risk with respect to derivatives. A bankruptcy of a counterparty would result in market risks as the market is subject to fluctuations while the derivatives need to be rearranged with another party. The Financial Counterparties Committee limits and monitors positions with financial counterparties.

BNG Bank clears parts of its derivatives centrally via London Clearing House through five clearing members which are all based in the UK. In preparation for the Brexit, the bank has previously set-up arrangements with EU-based clearing members. Central clearing has inevitably resulted in a shift in concentration risk from individual financial counterparties to the clearing members and the clearing houses.

Market risk

Definitions

Market risk is defined as an existing or future threat to the institution's capital and earnings as a result of market price fluctuations. It includes interest rate risk, foreign exchange risk, volatility risk, spread risk and index risk.

Interest rate risk

The bank's most important interest rate risk is the 'outright risk' to the interest rate swap curve, which is determined excluding the impact of spreads. This means that changes in spreads, such as credit spreads, CVA/DVA and cross currency basis spreads do not influence the interest rate risk position and hedging. There is no material presence of early redemption options in BNG Bank's regular loan portfolio. Likewise, there is no material exposure in mortgages and the bank does not attract savings from private individuals. Consequently, there is no necessity to model client behaviour in its interest rate risk models.

The limits with respect to interest rate risk were not breached in 2019, except for two occasions of a one-day breach. In the bank's opinion, its interest rate risk management was adequate, compliant with the regulatory standards and within the limits as defined in the bank's risk appetite and risk policies. For 2019 the table below outlines the Earnings at Risk effect of a minus 100 basis points instantaneous parallel decrease for the 1-year and 2-year horizon. The applied scenario in 2018 (gradual decrease of 180 basis points) was updated in the course of 2019. The movement of Earnings at Risk became positive due to the presence of floored floating rate assets in combination with decreased interest rates.

	2019	2018
Earnings at risk (in EUR million)		
Horizon		
1 year	30	-24
2 years	26	-84

Volatility risk

In managing its interest rate risk exposure, the bank allows itself a very limited range for assuming volatility risk to support the active interest rate position. This range is limited and

monitored by the Risk Management department on a daily basis. During 2019 no additional volatility risk was assumed to support the active interest rate position.

With regard to its other activities, BNG Bank's policy specifies that the volatility risks for new financial instruments should be hedged one-on-one, if hedging is possible and cost efficient. The resulting volatility risk is relatively small and is subject to monitoring by Risk Management.

Spread risk

The economic value of BNG Bank's equity is determined over its total portfolio of assets and liabilities. Both assets and liabilities are valued on the basis of an interest rate curve made up of market-based swap rates plus credit risk spreads. In case of interest rate swaps the CVA risk (counterparty risk) and DVA risk (the bank's own default risk) is included. Spread risk is not hedged by the bank. The impact of changes in these spreads is measured and monitored on a daily basis. For the fair value instruments impacting the profit and loss a warning level on the credit spread delta has been set.

Index risk

The bank has inflation linked instruments in its portfolio. The bank's policy specifies that financial instruments exposed to fluctuations in inflation risk should be hedged in full. The bank executes this policy and monitors the inflation delta on a daily basis.

Liquidity and funding risk

Liquidity risk is defined as the existing or future threat to the institution's capital and earnings due to the possibility that it will not be able at any moment to fulfil its payment obligations, without incurring any unacceptable costs or losses. The public sector consists largely of institutions with a long-term investment horizon. This means that assets frequently have long maturities, which can run into decades. As BNG Bank is unable to raise funding for these maturities, a funding mismatch is accepted, provided there are sufficient buffers to be able to refinance at acceptable cost with a high degree of probability also in times of stress.

Liquidity risk

BNG Bank wants to provide a constant and stable presence in the capital markets, because the bank wants to continue to meet the demand for credit even in difficult times. It also pursues a prudent liquidity policy to ensure that it can meet its obligations at all times. In this context, ongoing access to the money and capital markets is essential, along with the ongoing maintenance of attractive, varied and sufficiently large issuance programmes for investors. In addition, buffers are required in order to have access to liquidity in times of stress. One such buffer is formed by assets held explicitly for liquidity purposes, known as the liquidity portfolio. The management of the size and composition of this portfolio is one of the liquidity measures to comply with the requirement under the CRR to have an LCR of at least 100%. BNG Bank also holds an ample quantity of collateral with the ECB, which enables it to obtain short-term funding immediately. Since most of the bank's assets could serve as collateral at the ECB, this collateral may be further extended in the event of prolonged stress. The size of both buffers is tested in the liquidity stress tests, which are monitored on a monthly basis. Furthermore, the funding plan and corresponding planned liquidity gap is tested in an adverse stress scenario for the LCR and NSFR ratios. The bank considers its liquidity management to have been adequate in 2019 and that the strength of the bank's liquidity position is both amply sufficient and in compliance with the regulatory standards and limits set by the ALCO. As at end of 2019, the LCR ratio amounted to 158% (2018: 175%) and the NSFR ratio amounted to 126% (2018: 133%).

Funding risk

BNG Bank distinguishes between short-term and long-term funding. The majority of funding is from international capital markets. The bank maintains a number of programmes that enables it to have access to funding at all times at competitive levels. The bank pursues proactive investor relations which supports these efforts. The bank has a funding plan, in which the desired funding mix is described in more detail. Part of the funding plan is the annual issuance in benchmark size to maintain a 'BNG curve' in the market. These large-scale

issues ensure that the bank has a high profile among investors, allowing it to retain access to investors even in times of market stress. The actual realisation of this desired funding mix or the reason for diverging from it is monitored and evaluated by the ALCO.

Maturity analysis of financial assets and liabilities on the basis of the remaining contractual period

The amounts featured in the table below represent the non-discounted future cash flows of financial assets and liabilities. For the maturity analysis of issued guarantees and irrevocable commitments, see the 'Off-balance sheet commitments' section.

	31/12/2019				
	UP TO 3 MONTHS	3 - 12 MONTHS	1 - 5 YEARS	OVER 5 YEARS	TOTAL
Cash and balances held with central banks	1,272				1,272
Amounts due from banks	15	10	32	12	69
Cash collateral posted	14,649				14,649
Financial assets at fair value through the income statement	22	46	279	1,806	2,153
Financial assets at fair value through other comprehensive income	163	421	4,774	3,825	9,183
Interest-bearing securities at amortised cost	325	475	3,444	4,154	8,398
Loans and advances	8,340	8,638	34,316	56,565	107,859
Current tax assets		30			30
Other assets	130				130
Total financial assets (excluding derivatives)	24,916	9,620	42,845	66,362	143,743
Amounts due to banks	-1,337	-68	-96	-443	-1,944
Cash collateral received	-1,138				-1,138
Financial liabilities at fair value through the income statement	-14	-6	-217	-503	-740
Debt securities	-17,172	-13,493	-47,114	-44,700	-122,479
Funds entrusted	-2,764	-267	-1,816	-1,023	-5,870
Subordinated debt	-1		-22	-22	-45
Other liabilities	-53				-53
Total financial liabilities (excluding derivatives)	-22,479	-13,834	-49,265	-46,691	-132,269
Gross balanced derivatives					
Assets amounts receivable	8,516	8,534	20,483	19,873	57,406
Assets amounts payable	-7,402	-6,479	-15,170	-11,513	-40,564
Derivatives stated as assets	1,114	2,055	5,313	8,360	16,842
Liabilities amounts receivable	6,609	1,132	8,826	6,422	22,989

Continued on next page

Continuation of previous page					31/12/2019
Liabilities amounts payable					-7,430 -2,751 -15,482 -20,105 -45,768
Derivatives stated as liabilities					-821 -1,619 -6,656 -13,683 -22,779
Grand total					2,730 -3,778 -7,763 14,348 5,537

					31/12/2019

	UP TO 3 MONTHS	3 - 12 MONTHS			TOTAL
		1 - 5 YEARS	OVER 5 YEARS		
Cash and balances held with central banks		1,587			1,587
Amounts due from banks		14	10	49	16 89
Cash collateral posted		12,043			12,043
Financial assets at fair value through the income statement		13	41	233	1,898 2,185
Financial assets at fair value through other comprehensive income		101	310	4,285	5,207 9,903
Interest-bearing securities at amortised cost		636	620	2,911	4,147 8,314
Loans and advances		7,514	9,269	35,288	53,149 105,220
Current tax assets			8		8
Other assets		79			79
Total financial assets (excluding derivatives)		21,987	10,258	42,766	64,417 139,428
Amounts due to banks		-1,794	-81	-97	-467 -2,439
Cash collateral received		-419			-419
Financial liabilities at fair value through the income statement		-2	-5	-190	-702 -899
Debt securities		-9,075	-15,358	-49,691	-41,975 -116,099
Funds entrusted		-2,413	-455	-2,242	-1,127 -6,237
Subordinated debt		-1		-23	-22 -46
Other liabilities		-74			-74
Total financial liabilities (excluding derivatives)		-13,778	-15,899	-52,243	-44,293 -126,213
Gross balanced derivatives					
Assets amounts receivable		3,294	5,943	21,089	18,774 49,100
Assets amounts payable		-2,572	-4,226	-15,910	-12,552 -35,260
Derivatives stated as assets		722	1,717	5,179	6,222 13,840

Continuation of previous page

31/12/2018

Liabilities amounts receivable	6,169	4,163	11,260	13,515	35,107
Liabilities amounts payable	-7,290	-5,805	-17,925	-23,444	-54,464
Derivatives stated as liabilities	-1,121	-1,642	-6,665	-9,929	-19,357
Grand total	7,810	-5,566	-10,963	16,417	7,698

Encumbered and unencumbered financial assets

Encumbered financial assets are not freely disposable to meet liquidity needs in the short term. The following table shows the balance-sheet values of the assets, broken down into encumbered (not freely available) and unencumbered (freely available) assets.

				31/12/2019
	ENCUMBERED	UNENCUMBERED	TOTAL	
Cash and balances held with central banks	-	1,272	1,272	
Amounts due from banks	-	66	66	
Cash collateral posted	14,643		14,643	
Financial assets at fair value through the income statement	-	1,764	1,764	
Derivatives	-	10,004	10,004	
Financial assets at fair value through other comprehensive income	3,520	5,702	9,222	
Interest-bearing at amortised cost	689	7,075	7,764	
Loans and advances	428	87,874	88,302	
Value adjustments on loans in portfolio hedge accounting	-	16,462	16,462	
Non-financial assets	-	207	207	
Total	19,280	130,426	149,706	
Average (total) in 2019	22,562	140,260	162,822	

	31/12/2018		
	ENCUMBERED	UNENCUMBERED	TOTAL
Cash and balances held with central banks	-	1,587	1,587
Amounts due from banks	-	82	82
Cash collateral posted	12,043	-	12,043
Financial assets at fair value through the income statement	-	1,606	1,606
Derivatives	-	8,390	8,390
Financial assets at fair value through other comprehensive income	4,621	5,027	9,648
Interest-bearing at amortised cost	851	6,555	7,406
Loans and advances	399	84,635	85,034
Value adjustments on loans in portfolio hedge accounting	-	11,566	11,566
Non-financial assets	-	147	147
Total	17,913	119,596	137,509
Average (total) in 2018	20,159	130,439	150,598

Capital and solvency

Definitions

Regulatory capital relates to the capital requirements under the Capital Requirements Regulations and Capital Requirements Directive IV. For regulatory purposes the capital requirement is based on the Pillar 1 requirement for the aggregated risk-weighted assets (RWA) for the three major risk types (credit, operational and market risk). This requirement is supplemented by the so-called combined buffer requirement (CBR) and a Pillar 2 requirement (P2R). The CBR consists of a capital conservation buffer, a systemic risk buffer, a countercyclical buffer and a systemic relevance buffer. The P2R is an institutional specific requirement stemming from the Supervisor Review and Evaluation Process (SREP) conducted by the supervisor. The P2R covers risks underestimated or not covered by Pillar 1. BNG Bank employs the 'Standardised Approach' to calculate the RWAs.

In addition to the regulatory required capital BNG Bank calculates economic capital (EC) for Pillar 2 purposes. Economic capital covers all risks in our risk taxonomy, for which capital is deemed to be the mitigating instrument to cover unexpected losses. It is used for internal risk measurement and management. It is the amount of capital the bank deems adequate to pursue its strategy and which achieve a sufficient level of protection against large unexpected losses that could result from extreme market conditions or events.

Governance

The Executive Board is responsible for determining the policy with respect to capital. This is laid down in a capital adequacy statement and management plan. Next, the Executive Board is responsible for the allocation of capital. Decision making is prepared by the Capital Committee. This committee comprises all relevant stakeholders: the Executive Board, Public Finance, Treasury, Capital Management, Risk Management and Finance and Control.

Developments

As at December 2019, the fully CRR/CRD IV Common Equity Tier 1 (CET1), Tier 1 and total capital ratios were respectively 32%, 38% and 38%. All capital ratios were well above regulatory minimum requirements.

BNG Bank is required in 2020 to meet a minimum CET1 ratio of 10.25%, composed of a SREP requirement of 6.75% (4.5% Pillar 1 requirement and 2.25% Pillar 2 requirement), an Other Systemic Important Institution buffer (OSII) of 1.00% and a capital conservation buffer (CCB) of 2.50%. BNG Bank amply meets the requirements. The Overall Capital Requirement level for BNG Bank is 13.83%.

In 2011, BNG Bank lowered its dividend distribution policy to 25% in order to meet the additional capital requirements introduced by Basel III. In 2019 BNG Bank increased its dividend distribution policy to 50%. BNG Bank expects not to change this policy in 2020.

Capital management

The primary objective of the capital management strategy is to ensure that internal as well as external capital adequacy requirements are met at all times and sufficient capital is available to support the bank's strategy.

The capital management strategy builds on the bank's risk appetite and its business plans. Besides, expectations and requirements of external stakeholders (e.g. regulators, investors, rating agencies, shareholders), the bank's capitalization relative to the market, market developments and the feasibility of capital management actions are taken into account.

The capitalization policy is incorporated in the so-called Internal Capital Adequacy Assessment Process (ICAAP). Key to this policy is the capital management plan, which determines the level and composition of the capital based on the risks to be insured by that capital. In the ICAAP, regulatory as well as economic capital is taken into account. As part of the ICAAP a number of stress scenarios is executed in order to determine the adequacy and robustness of the capitalization. Next to the level of capitalization, the ICAAP determines the allocation per relevant type of risk.

On an ongoing basis, capital adequacy is measured and monitored against target capital ratios. These target levels are derived from the bank's risk appetite and strategy and quantified by the ICAAP. The allocation is derived from the ICAAP. This process ensures that the bank is operating in line with its risk appetite.

Capital structure

BNG Bank's capitalization is well above the capital requirements laid down in the Capital Requirement Regulations and Capital Requirements Directive IV (CRD IV). The capital structure consists mainly of common equity. The other part consists of Additional Tier 1 instruments.

The two tables on the next pages show the structure of the regulatory capital. The tables present the capital.

	31/12/2019	
	CAPITAL	IFRS EQUITY
Paid-up capital	139	139
Share premium	6	6
Retained earnings from previous years	3,567	3,567
Unappropriated profit		163
Accumulated other comprehensive income		
- Cash flow hedge reserve	13	13
- Cost of hedging	174	174
- Own credit adjustment	8	8
- Revaluation reserve	84	84
Common equity Tier 1 (CET1) capital before regulatory adjustments	3,991	4,154
Adjustments to CET1 capital as a result of prudential filters:		
- Cash flow hedge reserve	-13	
- Cumulative gains and losses arising from the bank's own credit risk related to derivatives liabilities	-1	
- Own credit risk for Financial liabilities at fair value through the income statement	-8	
- Value adjustments due to the prudential valuation requirements	-5	
- Intangible assets	-4	
- Expected credit loss allowance of Financial assets at fair value through OCI	-1	
Deduction of capital for securitisation positions eligible as alternatives for a risk weight of 1250%	0	
CET1 capital	3,959	
Additional Tier 1 capital:		
	733	733
Tier 1 capital	4,692	
Total equity	4,692	4,887

	31/12/2018		
	CAPITAL	FULLY	PHASED IN
			IFRS EQUITY
Paid-up capital		139	139
Share premium		6	6
Retained earnings from previous years		3,410	3,410
Unappropriated profit			337
Accumulated other comprehensive income			
- Cash flow hedge reserve		10	10
- Cost of hedging		222	222
- Own credit adjustment		9	9
- Revaluation reserve		125	125
Common equity Tier 1 (CET1) capital before regulatory adjustments	3,921	4,258	
Adjustments to CET1 capital as a result of prudential filters:			
- Cash flow hedge reserve		-10	
- Cumulative gains and losses arising from the bank's own credit risk related to derivatives liabilities		-2	
- Own credit risk for Financial liabilities at fair value through the income statement		-9	
- Value adjustments due to the prudential valuation requirements		-5	
- Intangible assets		-3	
- Expected credit loss allowance of Financial assets at fair value through OCI		-1	
Deduction of capital for securitisation positions eligible as alternatives for a risk weight of 1250%		-10	
CET1 capital	3,881		
Additional Tier 1 capital:		733	733
Tier 1 capital	4,614		
Total equity	4,614	4,991	

Prudential filters

BNG Bank applies the following prudential filters to the CET1 capital:

- The cash flow hedge reserve is eliminated.
- The benefits arising from own credit risk (DVA) in derivatives transactions are eliminated.
- The benefits arising from 'own credit risk' in relation to obligations classified as Financial liabilities at fair value through the income statement are eliminated.
- Due to the regulations on prudent valuation, an adjustment is calculated in relation to the balance sheet valuation of assets and liabilities that are carried at fair value
- The investments in the development of software is activated and amortised over three years. After a correction for 'deferred tax', the total of these intangible assets is deducted.

- The expected credit loss allowance of Financial assets at fair value through OCI.

Deductible items

In 2018 BNG Bank opted to reduce the CET1 capital by securitisation positions that are eligible for 1,250% solvency weighting. In 2019 there were no securitisation positions with a solvency rating of 1,250%.

Adjustments in CRD IV/CRR transition phase

The portion of the revaluation reserve related to Financial assets at fair value through OCI are fully included in the CET1 capital in 2019 and 2018.

Additional Tier 1 capital

For a clarification, please refer to note 22 of the Notes to items of the consolidated financial statements.

Related parties

Transactions with related parties

Entities with control, joint control or significant influence over BNG Bank

The State of the Netherlands owns 50% of the shares and voting rights of BNG Bank. As the other half of the shares is divided between a large number of shareholders, the State of the Netherlands has de facto control over BNG Bank. The holders of hybrid capital do not fall within the definition of related parties, as they have no (joint) control or significant influence over BNG Bank. BNG Bank has direct exposure to the State of the Netherlands in the form of purchased, publicly tradable government securities. The bank also has a large portfolio of loans and advances with direct guarantees from the State, or with guarantees from the WSW (social housing) and WFZ (Healthcare) guarantee funds, for which the State of the Netherlands acts as a backstop. In all cases, this concerns private lending.

Subsidiaries

This relates to the BNG Bank subsidiaries Hypotheekfonds voor Overheidspersoneel and BNG Gebiedsontwikkeling included in the consolidation. BNG Bank has intercompany transactions with these parties, which consist of the issue of private loans and advances, credit balances held in current accounts and off-balance sheet commitments. All of these intercompany transactions are eliminated from the figures in and notes to the consolidated financial statements.

Associates, joint ventures and joint operations

This relates to associates, as well as joint ventures and joint operations entered into by BNG Gebiedsontwikkeling. A list of these parties is provided in a separate note in these financial statements. Transactions with these contacts consist of loans and advances, credit balances held in current accounts and off-balance sheet commitments (the undrawn portions of credit facilities).

Executive Board members of the bank

BNG Bank has not granted any loans, advance payments or guarantees to individual members of the Executive Board or Supervisory Board of BNG Bank.

	31/12/2019	31/12/2018
State of the Netherlands		
Direct exposure in the form of purchased government securities	1,696	1,936
Lending with direct guarantees from the State	648	667
Lending with indirect guarantees from the State (WSW/WFZ)	43,830	42,587
Subsidiaries		
Lending to subsidiaries	108	127
Credit balances held by subsidiaries	13	8
Off-balance sheet commitments to subsidiaries	7	7
Associates, joint ventures and joint operations		
Lending to associates, joint ventures and joint operations	99	105
Credit balances held by associates, joint ventures and joint operations	9	19
Off-balance sheet commitments to associates, joint ventures and joint operations	31	31

BNG Bank's principal decision-making bodies

The most important decisions and acts of management are taken and carried out by the Executive Board. The policy pursued is assessed and supervised by the Supervisory Board.

Remuneration

BNG Bank's remuneration policy consists of fixed and variable remuneration components. The total remuneration granted to 'Identified Staff', i.e. individuals with direct influence on the bank's policy and risks, was EUR 5 million in 2019 (2018: EUR 5 million). The Identified Staff consisted of 31 individuals in 2019 (2018: 30). In the case of 24 of these individuals (2018: 23) a part of the variable remuneration was conditional. Following reassessment, for the Executive Board members this portion will be paid after three years unless the achievement of the associated targets is found to have jeopardised BNG Bank's long-term continuity. In case the Identified Staff is granted an amount of variable remuneration exceeding a monthly salary or EUR 10,000 or both, 40% of the variable remuneration will be deferred over a three year period. Annually, one third of the deferred amount will be granted. This way, there is a justified difference with the deferred variable remuneration of the Managing Board members (50% at once and 50% after four years), who have more influence on the risk profile than the Identified Staff. Since 2016, the variable remuneration component has been subject to a maximum of 20% of the fixed salary for all bank employees. No employee received a total remuneration exceeding EUR 1 million in 2019 (2018: none). As from 1 January 2020 all employees, including Executive Board members, no longer receive a variable remuneration.

The remuneration of the identified staff can be divided into three groups: Executive Board members, senior management directly reporting to Executive Board members and other identified staff.

Amounts in thousands of euros	2019			2018		
	FIXED REMUNERA- TION	VARIABLE REMUNERA- TION	TOTAL	FIXED REMUNERA- TION	VARIABLE REMUNERA- TION	TOTAL
Executive Board members	1,018	-	1,018	993	90	1,083
Senior management	2,254	81	2,336	2,214	64	2,278
Other identified staff	1,613	89	1,702	1,612	71	1,683
Total	4,885	170	5,055	4,819	225	5,044

In addition, the bank pays a monthly employer's pension contribution. Since 1 January 2015, pension accrual over salary in excess of EUR 100,000 is no longer possible under the current ABP pension plan. This means that pension accrual is capped at a pensionable income of EUR 100,000. In 2019 this amount was capped at a income of EUR 107,593. As a consequence of this cap for tax purposes and the lower pension accrual, BNG Bank decided to compensate the employees concerned who were in the bank's employment on 1 January 2015 for lower pension accrual.

Remuneration of the Executive Board

The remuneration of the Executive Board is based on the principles formulated in the Remuneration Policy, the highlights of which are included in the Report of the Supervisory Board. The complete Remuneration Policy is published on bngbank.nl. Since 2002, the fixed remuneration component has only been adjusted by the percentages set out in the general Collective Labour Agreement for the banking industry. Management and staff do not own BNG Bank shares or options and receive no additional remuneration through subsidiaries of the bank. Effective from 1 January 2019, BNG Bank has ended the variable remuneration of Executive Board members. Only the deferred variable remuneration of Executive Board members in previous years can be paid out in the coming years.

Remuneration awarded to Executive Board members

	2019	2018	2019	2018 ¹	2019	2018	2019	2018
	FIXED REMUNERATION		VARIABLE REMUNERATION		COMPENSATION FOR PENSION ACCRUAL OVER SALARY >100K		PENSION CONTRIBUTIONS	
G.J. Salden	309	301	-	-	-	-	25	24
O.J. Labe	333	325	-	-	29	29	26	24
J.C. Reichardt	377	367	-	90	35	35	27	26
Total	1,018	993	-	90	64	64	78	74

¹ This amount of EUR 90 thousand concerns a one-off payment regarding the discontinuation of the variable remuneration. With this one-off payment Mr Reichardt's contractual right to future variable remuneration has been bought off.

Deferred variable remuneration

	2019	2018	2017	2016
J.C. Reichardt	-	-	33	32

Deferred variable remuneration of former Executive Board members

	2019	2018	2017	2016
C. van Eykelenburg	-	-	41	40

The remuneration awarded in the reporting period is the remuneration which has been recognised as an expense in full in the income statement. The income statement for 2019 includes EUR 1 million (2018: EUR 1 million) in remuneration and pension costs. The total short-term remuneration comprises the fixed remuneration, the variable remuneration and the compensation for pension accrual over salary in excess of EUR 100,000.

The Chair of the Executive Board received an allowance for business expenses of EUR 5,100 in 2019 (2018: EUR 5,100). The allowance for the other members of the Executive Board is EUR 3,900 in 2019 (2018: EUR 3,900).

Remuneration of the Supervisory Board

Effective from 1 January 2017 the remuneration of the Supervisory Board can increase by the same percentage as the increases under the Collective Labour Agreement for the Banking Industry. The total remuneration of the Supervisory Board decreased by 4% in 2019 (2018: 1%). The policy is directed towards market-compatible remuneration that is irrespective of the company's result. It also reflects the nature of the company, the envisaged quality of the Supervisory Board members, the required availability for the task at hand, as well as the time required and aspects of responsibility and liability. Supervisory Board members do not own BNG Bank shares or options and receive no additional remuneration through subsidiaries of the bank.

Members of the Supervisory Board who were appointed or resigned during the financial year received pro rata remuneration. Members of the Audit Committee & Risk Committee, the Selection and Appointment Committee, the Remuneration Committee and the Market Strategy Committee received an additional allowance for these duties. Furthermore, the Chair of the Supervisory Board received an allowance in addition to the basic remuneration. These allowances are set out in the 'Remuneration of Supervisory Board members' statement. The Supervisory Board members received an expense allowance of EUR 1,000 (2018: EUR 1,000). Members who sat on one or more committees received an additional expense allowance per committee of EUR 500 (Audit Committee and Risk Committee) and EUR 250 (Remuneration Committee and Human Resource Committee), respectively. Former Supervisory Board members received no remuneration.

Remuneration of Supervisory Board members

The amounts presented below are in thousands of euros. These figures include additional payments and expense allowances and exclude VAT.

	2019	2018
Ms M. Sint, Chair	48	47
J.C.M. van Rutte, Vice-chair	33	32
C.J. Beuving	37	36
H. Arendse (from 18 April 2019)	30	-
J.B.S. Conijn	33	32
Ms M.E.R. van Elst (from 1 March 2018)	33	27
Ms J. Kriens	30	29
J.J. Nooitgedagt (until 18 April 2019)	13	39
T.J.F.M. Bovens (until 18 April 2019)	9	26
L.M.M. Bolsius (until 20 April 2018)	-	9
Total	266	277

Off-balance sheet commitments

Contingent liabilities

This includes all commitments arising from transactions for which the bank has issued guarantees on behalf of a third party. To a limited extent, these guarantees are covered by a counter guarantee from public authorities. These are mainly Letters of Credit with a remaining contractual maturity of more than five years, which the bank has issued on behalf of clients in the public utilities sector. BNG Bank records liabilities at the underlying principal amount that would need to be paid in the event of the borrower defaulting.

	31/12/2019	31/12/2018
Contingent liabilities	60	32

Revocable facilities

This includes all commitments attributable to revocable current-account facilities.

	31/12/2019	31/12/2018
Revocable facilities	3,764	6,050

Irrevocable facilities

This includes all irrevocable commitments which can lead to the granting of loans and advances, and is divided as follows:

	31/12/2019	31/12/2018
Outline agreements concerning the undrawn part of credit facilities	5,230	5,887
Contracted loans and advances to be distributed in the future	1,921	1,737
Total	7,151	7,624

According to contract, these contracted loans and advances will be distributed as follows:

	31/12/2019	31/12/2018
Up to 3 months	687	448
3 to 12 months	583	549
1 to 5 years	651	705
Over 5 years	0	35
Total	1,921	1,737

Nearly all these loans and advances have a contractual term to maturity of more than five years. The average interest rate is 1.2% (2018: 1.7%). BNG Bank states these obligations at the underlying, not yet recorded, principal amount.

Encumbered financial assets and liabilities

A part of the financial assets and liabilities is encumbered because these assets serve to secure and act as collateral for money market transactions and lending transactions. The following table shows the nominal sheet values and the collateral values.

	31/12/2019		31/12/2018	
	NOMINAL	COLLATERAL	NOMINAL	COLLATERAL
	VALUE	VALUE	VALUE	VALUE
Type of collateral				
Collateral pledged to the central bank ¹	13,709	9,104	14,203	9,635
Securities provided in derivatives transactions	3,336	4,209	4,566	5,472
Cash deposited in relation to derivatives transactions	14,649	14,643	12,046	12,043
Given as collateral	31,694	27,956	30,815	27,150
Securities received in derivatives transactions	-	-	-	-
Cash received in relation to derivatives transactions	1,138	1,137	419	419
Received as collateral	1,138	1,137	419	419
Total	30,556	26,819	30,396	26,731

¹ Of the total value of loans provided as collateral to the central bank, only a limited part has actually been used as collateral. At year-end 2019, the value of the collateral in use under the guarantee for clients' collection files amounted to EUR 428 million (year-end 2018: EUR 399 million).

Liability of board members

Members of the Executive and Supervisory Boards of the company are indemnified by the company against any personal liability, except in the case of deliberate intent or gross negligence. In addition, the company has taken out a directors' liability insurance policy for members of the Executive and Supervisory Boards and employees acting on the company's behalf as members of the Executive Board or Supervisory Board of one or more of the company's associates.

Events after the balance sheet date

Early 2020 the coronavirus started to spread across the world. The impact on economic growth in the Netherlands will depend on the severity of the outbreak. At this moment it is too early to define the financial impact on our clients and as a result the impact on BNG Bank.

There are no other events after the balance sheet date to report that require adjustments to the figures or disclosure in the financial statements.

Proposed profit appropriation

Amounts in millions of euros

	2019	2018
Net profit	163	337
Dividend distribution on hybrid capital	-21	-19
Profit attributable to shareholders	142	318
Appropriation of profit attributable to the bank's shareholders is as follows:		
Appropriation to the 'Retained earnings' pursuant to Article 23(3) of the BNG Bank Articles of Association	14	32
Dividend pursuant to Article 23(3) of the BNG Bank Articles of Association	7	7
	21	39
Appropriation to the 'Retained earnings' pursuant to Article 23(4) of the BNG Bank Articles of Association	78	127
Dividend pursuant to Article 23(4) of the BNG Bank Articles of Association	64	152
	142	279

The profit appropriation is based on the total net profit for 2019. The dividend distribution takes into account the EUR 25 million dividend already paid on the hybrid capital in May 2019 charged to the Other reserves (EUR 21 million after tax).

Associates and joint ventures

	31/12/2019	31/12/2018
Associates		
Dataland BV, Rotterdam A municipal non-profit initiative that aims to make information on registered properties – as held by municipalities and/or other public entities – available to a wide audience.	30%	30%
Data B Mailservice Holding BV, Leek Provision of services to, among others, public sector organisations, ranging from printing and mail services to payment-related, direct marketing and messaging services.	45%	45%

	31/12/2019	31/12/2018
Joint ventures entered into by BNG Gebiedsontwikkeling BV		
Joint development and allocation of land with public authorities, at own expense and risk. The parties involved in the joint ventures have an equal voting right, which means that no single party has control.		
Ontwikkelingsbedrijf Bedrijvenpark Pannenweg CV, Nederweert Ontwikkelingsbedrijf Bedrijvenpark Pannenweg Beheer BV te Nederweert Development and allocation of land for industrial estates	0% 50%	50%
CV Ontwikkelingsmaatschappij Zenkeldamshoek, Goor Zenkeldamshoek Beheer BV, Goor Development and allocation of land for industrial estates	80% 50%	80% 50%
De Bulders Woningbouw CV	50%	50%

Continued on next page

	31/12/2019	31/12/2018
Continuation of previous page		
De Bulders Woningbouw BV	50%	50%
Development and allocation of land for industrial estates		
Ontwikkelingsmaatschappij Westergo CV, Harlingen	50%	50%
Ontwikkelingsmaatschappij Westergo BV, Harlingen	50%	50%
Development and allocation of land for industrial estates		
Ontwikkelingsmaatschappij 'Het Nieuwe Westland' CV, The Hague	50%	50%
Ontwikkelingsmaatschappij 'Het Nieuwe Westland' BV, The Hague	50%	50%
Development and allocation of land for residential construction		
Ontwikkelingsmaatschappij ROM-S CV (Schelluinen), The Hague	50%	50%
ROM-S Beheer BV (Schelluinen) te The Hague	50%	50%
Development and allocation of land for industrial estates and car parking facilities		
Project Suijsenwaerde CV, The Hague	80%	80%
Project Suijsenwaerde Beheer BV, The Hague	50%	50%
Development and allocation of land for residential construction and recreational housing		
CV Bedrijvenpark Oostflakkee, The Hague	80%	80%
Bedrijvenpark Oostflakkee Beheer BV, The Hague	50%	50%
Development and allocation of land for industrial estates		
SGN Bestaand Rijsenhout CV, The Hague	50%	50%
SGN Nieuw Rijsenhout CV, The Hague	50%	50%
SGN Advies CV, The Hague	43%	43%
SGN Bestaand Rijsenhout Beheer BV, The Hague	50%	50%
SGN Nieuw Rijsenhout Beheer BV, The Hague	50%	50%
SGN Advies BV Beheer, The Hague	50%	50%
Stallingsbedrijf Glastuinbouw Nederland Groep BV, The Hague	50%	50%
Development and allocation of land for glasshouse horticulture locations		
Ontwikkelmaatschappij Meerburg CV, Zoeterwoude	50%	50%
Ontwikkelmaatschappij Meerburg Beheer BV, Zoeterwoude	50%	50%
Development and allocation of land for residential construction, sports fields and office buildings		
ROM-D CV, The Hague	0%	11%
ROM-D Beheer NV, The Hague	0%	25%
Development and allocation of land for industrial estates		
Continued on next page		

Continuation of previous page	31/12/2019	31/12/2018
Ontwikkelcombinatie De Bongerd CV, Amsterdam	14%	14%
Ontwikkelcombinatie De Bongerd BV, Amsterdam	14%	14%
Real estate development for residential construction and parking facilities		
Regionaal bedrijvenpark Laarakker CV, Cuijk	50%	50%
Regionaal bedrijvenpark Laarakker BV, Cuijk	50%	50%
Development and allocation of land for industrial estates		
Wonen Werken Waterman BV, Rijnsbergen	50%	50%
Wonen Werken Waterman CV, Rijnsbergen	50%	50%
Development and allocation of land for residential construction and industrial estates		
De Jonge Voorn BV, Guisveld (Zaandam)	80%	80%
De Jonge Voorn CV, Guisveld (Zaandam)	80%	80%
Development and allocation of land for residential construction		

Summarised financial information

	2019	2018
Associates		
Balance sheet value of investment (note 8)	3	3
Value of the share in:		
Total assets	4	5
Total liabilities	1	1
Income	4	4
Result from continued operations	1	1
Equity	2	3
Comprehensive income	2	2
Joint ventures entered into by BNG Gebiedsontwikkeling BV	32	41
Balance sheet value of investment (note 8)		
Value of the share in:		
Total assets	88	101
Total liabilities	46	68
Income	28	20
Result from continued operations	-4	-1
Equity	32	33
Comprehensive income	32	33

BNG Gebiedsontwikkeling (a wholly-owned BNG Bank subsidiary) invests in and develops land on its own account in collaboration with local authorities. This collaboration takes the form of a joint venture involving the use of limited partnerships. The risk incurred by BNG Bank is the total amount of capital invested in the participating interest, increased by further future payments obligations and retained profits. At year-end 2019, this risk amounted to EUR 32 million (2018: EUR 41 million), of which EUR 0 million related to future payment obligations (2018: EUR 0 million). On one hand the year 2019 showed a further improvement of the income from the land sales contributed, on the other hand a few additional impairments were necessary.

Involvement in non-consolidated structured entities

	2019	2018
Securitisations		
Scope	24,630	30,159
Involvement in entity (balance sheet value/size in %)	19%	13%
Balance sheet value of interest/investment:		
Financial assets at fair value through other comprehensive income (from note 6)	-	-
Interest-bearing securities at amortised cost (from note 8)	4,667	3,995
Total balance sheet value	4,667	3,995
Maximum exposure	4,667	3,995
Ratio of balance sheet value vs maximum exposures	1	1
Amount in revenue per type:		
Fund return	N/A	N/A
Management fee	N/A	N/A
Interest revenue	5	11
Results from sales	-1	-8
Total revenue	4	3
Loss on investment during reporting period:		
Through equity	-	-
Through the income statement	-	-
Total losses	-	-

Involvement in non-consolidated securitisation and covered bond programmes via structured entities

BNG Bank has investments in securitised interest-bearing securities covered by additional security through non-consolidated structured entities. Mortgage portfolios serve as collateral for the securitisations and covered bonds. The funds invested by investors, including BNG Bank, serve to finance the underlying mortgages. The structured entities are independent

entities that do not carry out any activities other than managing investments and the associated money flows. Apart from its interest as an investor in interest-bearing securities, BNG Bank has not financed these structured entities or supported them in any other way, nor does it have any intention to do so in the near future. The bank has not transferred any assets to these structured entities.

The Hague, 13 March 2020

Executive Board

Ms G.J. Salden, Chair

O.J. Labe

J.C. Reichardt

Supervisory Board

Ms M. Sint, Chair

J.C.M. van Rutte, Vice-chair

C.J. Beuving

H. Arendse

J.B.S. Conijn

Ms M.E.R. van Elst

Ms J. Kriens

6.2 Company financial statements

Company balance sheet		NOTE	31/12/2019	31/12/2018	
Amounts in millions of euros					
Assets					
Cash and balances held with central banks	1		1,272	1,587	
Amounts due from banks	2		66	82	
Cash collateral posted	3		14,643	12,043	
Financial assets at fair value through the income statement	4		1,764	1,606	
Derivatives	5		10,004	8,390	
Financial assets at fair value through other comprehensive income	6		9,222	9,648	
Interest-bearing securities at amortised cost	7		7,764	7,406	
Loans and advances	8		88,249	85,002	
Value adjustments on loans in portfolio hedge accounting	9		16,462	11,566	
Associates and joint ventures	10		55	59	
Property & equipment	11		18	17	
Current tax assets	12		29	8	
Other assets	13		130	79	
Total assets			149,678	137,493	
Liabilities					
Amounts due to banks	14		1,933	2,383	
Cash collateral received	15		1,137	419	
Financial liabilities at fair value through the income statement	16		674	762	
Derivatives	17		22,651	19,223	
Debt securities	18		112,661	103,722	
Funds entrusted	19		5,566	5,786	
Subordinated debts	20		33	32	
Deferred tax liabilities	21		78	99	
Other liabilities			58	76	
Total liabilities			144,791	132,502	
Equity					
Share capital			139	139	
Share premium reserve			6	6	
Legal reserves					
- Revaluation reserve			84	125	
- Cash flow hedge reserve			13	10	
- Reserve for fair value increases			129	83	
Retained earnings			3,438	3,327	
Own credit adjustment			8	9	
Cost of hedging reserve			174	222	
Net profit			163	337	
Equity attributable to shareholders	22		4,154	4,258	
Hybrid capital	23		733	733	
Total equity	24		4,887	4,991	
Total liabilities and equity			149,678	137,493	

Company income statement		NOTE	2019	2018
Amounts in millions of euros				
- Interest revenue calculated using the effective interest method			4,887	5,151
- Other interest revenue			633	566
Total interest revenue			5,520	5,717
- Interest expenses calculated using the effective interest method			4,992	5,177
- Other interest expenses			94	107
Total interest expenses			5,086	5,284
Interest result	25		434	433
- Commission income			32	30
- Commission expenses			2	2
Commission result	26		30	28
Result on financial transactions	27		37	112
Results from participating interest	28		-2	1
Other results			-1	0
Total income			498	574
Staff costs	31		39	39
Other administrative expenses	32		37	32
Depreciation	33		3	3
Total operating expenses			79	74
Net impairment losses on financial assets	33		153	-2
Net impairment losses on associates and joint ventures			-	-
Contribution to resolution fund	34		8	12
Bank Levy	34		30	31
Total other expenses			191	41
Profit before tax			228	459
Income tax expense			65	122
Net profit			163	337
- of which attributable to the holders of hybrid capital			21	19
- of which attributable to shareholders			142	318

The references refer to the notes to the company financial statements. The notes to the company financial statements are an integral part of the company financial statements.

Company statement of comprehensive income		2019	2018
Amounts in millions of euros. All figures in the statement are after taxation.			
Net profit		163	337
Recyclable results recognised directly in equity			
Changes in cash flow hedge reserve:			
- Unrealised value changes	3	-9	
- Realised value changes transferred to the income statement	0	0	
	3	-9	
Changes in cost of hedging reserve			
- Unrealised value changes	-50	195	
- Realised value changes transferred to the income statement	2	5	
	-48	200	
Changes in the revaluation reserve for financial assets at fair value through other comprehensive income			
- Unrealised value changes	-23	-36	
- Realised value changes transferred to the income statement	-18	-28	
	-41	-64	
Total recyclable results	-86	127	
Non-recyclable results recognised directly in equity:			
- Change in fair value attributable to change in credit risk of financial liabilities designated at FVTPL	-1	0	
- Movement in actuarial results	0	0	
Total non-recyclable results	-1	0	
Results recognised directly in equity	-87	127	
Total	76	464	
- of which attributable to the holders of hybrid capital	21	19	
- of which attributable to shareholders	55	445	

Company cash flow statement	2019	2018
Amounts in millions of euros		
Cash flow from operating activities		
Profit before tax	228	459
Adjusted for:		
- Depreciation	3	3
- Impairments	153	-2
- Unrealised results through the income statement	-15	-76
Changes in operating assets and liabilities:		
- Changes in Amounts due from and due to banks (not due on demand)	-532	3
- Changes in Cash collateral posted and received	-1,854	1,908
- Changes in repos and reverse repos	0	-1
- Changes in Loans and advances	-3,434	-178
- Changes in Funds entrusted	-267	280
- Changes in Derivatives	626	1,323
- Corporate income tax paid	-86	-140
- Other changes from operating activities	-232	-323
Net cash flow from operating activities	-5,410	3,256
Cash flow from investing activities		
Investments and acquisitions pertaining to:		
- Financial assets at fair value through the income statement	-3	-
- Financial assets at fair value through other comprehensive income	-1,776	-162
- Interest-bearing securities at amortised cost	-1,824	-2,796
- Investments in associates and joint ventures	-	-
- Property and equipment	-3	-3
Disposals and redemptions pertaining to:		
- Financial assets at fair value through the income statement	45	23
- Financial assets at fair value through other comprehensive income	2,267	1,085
- Interest-bearing securities at amortised cost	1,516	503
- Assets held for sale	-	29
Net cash flow from investing activities	222	-1,321
Cash flow from financing activities		
Amounts received on account of:		
- Financial liabilities at fair value through the income statement	12	-
- Debt securities	401,879	313,242
Amounts paid on account of:		
Continued on next page		

Continuation of previous page

Company cash flow statement

- Financial liabilities at fair value through the income statement
- Debt securities
- Subordinated debt
- Dividend distribution on hybrid capital
- Dividend distribution to shareholders

Net cash flow from financing activities

2019

2018

-143

-185

-396,691

-316,234

-

-

-25

-25

-159

-141

4,873

-3,343

Net change in cash and cash equivalents

-315

-1,408

Cash and cash equivalents as at 1 January

1,591

2,999

Cash and cash equivalents as at 31 december

1,276

1,591

Cash and cash equivalents as at 31 December:

- Cash and balances held with central banks
- Cash equivalents in the Amount due from banks item
- Cash equivalents in the Amount due to banks item

1,272

1,587

4

4

0

0

1,276

1,591

Notes to cash flow from operating activities

Interest income received

5,881

5,585

Interest expenses paid

-5,633

-5,243

248

342

Company statement of changes in equity

Amounts in millions of euros. All figures in the statement are after taxation.

	SHARE CAPITAL	SHARE PREMIUM	REVALUATION RESERVE	CASH FLOW HEDGE	RESERVE FOR FAIR VALUE	OWN CREDIT ADJUST- MENT RESERVE	COST OF HEDG- ING	UNAPPRO- PRI- INGS	ATTRIBUT- ABLE TO SHARE- HOLDERS	EQUITY
	TOTAL				RESERVE INCREASE	MENT RESERVE	ING	ATATED PROFIT	HOLDERS CAPITAL	TOTAL
Balance as at 01/01/2018	139	6	189	19	92	9	22	3,478	0	3,954
Total comprehensive income			-64	-9		-	200	337	464	464
Transfer to reserve for fair value increases					-9			9		0
Dividend distribution to the bank's shareholders							-141		-141	-141
Dividend distribution to holders of hybrid capital							-19		-19	-19
Balance as at 31/12/2018	139	6	125	10	83	9	222	3,327	337	4,258
Appropriation from previous year's profit								337	-337	0
Balance as at 01/01/2019	139	6	125	10	83	9	222	3,664	-	4,258
Total comprehensive income			-41	3		-1	-48	163	76	76
Transfer to reserve for fair value increases					46			-46		0
Dividend distribution to the bank's shareholders							-159		-159	-159
Dividend distribution to holders of hybrid capital							-21		-21	-21
Balance as at 31/12/2019	139	6	84	13	129	8	174	3,438	163	4,154

BNG Bank has not recognised any results from minority interests in the equity which is attributable to third parties. With the exception of hybrid capital, the entire equity is attributable to the shareholders.

Accounting principles for the company financial statements

The company financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB) and adopted throughout the European Union (EU), and with Part 9, Book 2 of the Dutch Civil Code. As far as the financial accounting principles are concerned, reference is made, with the exception of the accounting principles mentioned below, to the notes to the accounting principles for the consolidated financial statements.

Participating interests

The balance sheet item Participating interests is stated according to the equity method.

Statutory reserve for fair value increases

Pursuant to Section 2:390 sub 1 of the Dutch Civil Code, for capital protection purposes a statutory reserve must be maintained at the expense of the freely distributable reserves (other reserves) or freely distributable profit (unappropriated profit) in relation to fair value increases of financial instruments stated as assets in the balance sheet for which there is no regular market quotation.

Foreign currency

The company financial statements are prepared in (millions of) euros, unless stated otherwise. The euro is used as the functional and reporting currency of BNG Bank.

Notes to the company financial statements

Amounts in millions of euros

Note 34 to the consolidated financial statements includes a breakdown of balance sheet values by remaining contractual maturity (due on demand and not due on demand).

For the related party disclosures, please refer to the consolidated financial statements.

1 Cash and balances held with central banks

	31/12/2019	31/12/2018
Cash on hand	0	0
Current account balances with the central bank (due on demand)	1,272	1,587
Total	1,272	1,587

2 Amounts due from banks

The Amounts due from banks item includes all receivables from banks measured at amortised cost.

	31/12/2019	31/12/2018
Short-term loans and current account balances	4	4
Long-term lending	62	78
Total	66	82

Note 30 provides an overview of the breakdown of financial assets subject to impairment into impairment stages.

3 Cash collateral posted

The cash collateral is posted with third parties under netting agreements and as such is not freely available to BNG Bank.

Note 30 provides an overview of the breakdown of financial assets subject to impairment into impairment stages.

4 Financial assets at fair value through the income statement

This item includes:

- Financial assets mandatorily measured at fair value through profit or loss. This concerns financial assets that have failed to pass the SPPI test; and
- Financial assets designated as measured at fair value through profit or loss.

	31/12/2019	31/12/2018
Mandatorily measured at FVTPL		
Loans and advances	136	136
Designated as measured at FVTPL		
Loans and advances	555	523
Interest-bearing securities	1,073	947
Total	1,764	1,606

The total redemption value of these loans and advances and interest bearing securities at year-end 2019 is EUR 1,122 million (2018: EUR 1,114 million). Note 25 explains the changes in fair value recognised through the income statement.

5 Derivatives

This balance sheet item includes the positive fair value of derivatives not settled-to-market. Note 25 explains the changes in fair value recognised through the income statement.

	31/12/2019	31/12/2018
Derivatives not involved in a hedge accounting relationship	324	289
Derivatives involved in a portfolio hedge accounting relationship	2,822	2,853
Derivatives involved in a micro hedge accounting relationship	6,848	5,248
Receivables related to STM derivative contracts	10	-
Total	10,004	8,390

6**Financial assets at fair value through other comprehensive income**

This includes purchased interest-bearing securities that are held within the Hold to Collect and Sell business model and for which the bank has not used the fair value option.

	31/12/2019	31/12/2018
IBSs issued by:		
Governments	6,363	6,682
Supranational organisations	492	543
Credit institutions	2,287	2,341
Other financial corporations	26	26
Non-financial corporations	54	56
Total	9,222	9,648

Transfers without derecognition

At year-end 2019, BNG Bank had transferred no financial assets in repurchase transactions without derecognition.

Notes 30 and 33 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

7**Interest-bearing securities at amortised cost**

This includes purchased interest-bearing securities that are held within the Hold-to-Collect business model and for which the bank has not used the fair value option.

	31/12/2019	31/12/2018
IBSs issued by:		
Governments	1,696	1,464
Credit institutions	-	21
Other financial corporations	5,056	4,951
Non-financial corporations	1,018	977
Allowance for credit losses	-6	-7
Total	7,764	7,406

Notes 30 and 33 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

8 Loans and advances

The Loans and advances item includes short-term and long-term loans to clients insofar as they pass the SPPI test, as well as current account debit balances held by clients. All positions are held within the Hold-to-Collect business model.

	31/12/2019	31/12/2018
Short-term loans and current account balances	5,047	4,329
Long-term lending	83,393	80,719
	88,440	85,048
Allowance for credit losses	-191	-46
Total	88,249	85,002

Notes 30 and 33 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

9 Value adjustments on loans in portfolio hedge accounting

This refers to the value adjustments of the effective portion of the hedged interest rate risk of loans and advances involved in a portfolio hedge accounting relationship.

	2019	2018
Movements of value adjustments on loans in portfolio hedge accounting		
Opening balance	11,566	11,813
Elimination of IAS 39 reclassification of financial assets 'available for sale' to 'amortised cost'	-	-128
Movements in the unrealised portion in the financial year	6,204	846
Amortisation in the financial year	-1,258	-834
Realisation from sales in the financial year	-50	-131
Closing balance	16,462	11,566

10 Participating interests

	31/12/2019	31/12/2018	31/12/2019	31/12/2018
	PARTICIPATING SHARE		BALANCE SHEET VALUE	
Subsidiaries				
BNG Gebiedsontwikkeling BV, The Hague	100%	100%	46	50
Hypotheekfonds voor Overheidspersoneel BV, The Hague	100%	100%	6	6
Subtotal			52	56
Associates				
Dataland BV, Rotterdam	30%	30%	0	0
Data B Mailservice BV, Leek	45%	45%	3	3
Subtotal			3	3
Total			55	59

For a description of the bank's subsidiaries and associates, please refer to section 'Other information' of this document and to section 'Associates and joint ventures', respectively, of the consolidated financial statements. For summarised financial information on associates, refer to section 'Summarised financial information'.

11 Property and equipment

	2019	2018	2019	2018	2019	2018	2019	2018
	PROPERTY		EQUIPMENT		RIGHT-OF-USE ASSET		TOTAL	
Historical cost								
Closing balance 31 December 2018	49	49	22	19	-	-	71	68
Impact of IFRS 16	-	-	-	-	2	-	2	-
Opening balance 1 January 2019	49	49	22	19	2	-	73	68
Investments	0	0	2	3	0	-	2	3
Disposals	0	-	0	-	0	-	0	-
Value as at 31 December	49	49	24	22	2	-	75	71
Depreciation								
Accumulated depreciation as at 1 January	37	37	17	14	0	-	54	51
Depreciation during the year	1	0	2	3	0	-	3	3
Accumulated depreciation as at 31 December	38	37	19	17	-	-	57	54
Total	11	12	5	5	2	-	18	17

Estimated useful life	
Buildings	33 1/3 years
Technical installations	15 years
Machinery and inventory	5 years
Right-of-use asset	5 years
Hardware and software	3 years

12 Other assets

The other assets are primarily composed of amounts receivable from lending to clients.

13 Amounts due to banks

In 2019, the payables related to 'Settle to Market' (STM) derivative contracts, including variation margin and related price alignment amounts, that are considered as a single unit of account are stated in note 5 and 16.

	31/12/2019	31/12/2018
Current account balances	0	0
Payables related to STM derivative contracts	-	1
Deposits	1,377	1,837
Private loans	556	545
Total	1,933	2,383

14 Cash collateral received

The cash collateral is received from third parties under netting agreements and as such is not freely available to BNG Bank.

15 Financial liabilities at fair value through the income statement

This item includes debt securities designated as measured at fair value with changes in fair value recognised through the income statement.

	31/12/2019	31/12/2018
Publicly placed debt securities	408	238
Privately placed debt securities	266	524
Total	674	762

The total redemption value of the debt securities at year-end 2019 is EUR 514 million (2018: EUR 613 million). The difference between the financial liability's carrying amount and the redemption value at year-end 2019 is EUR 160 million (2018: EUR 149 million). Financial liabilities are measured at fair value through the income statement on the relevant funding curve including a mark-up for 'own credit risk'. The total change in value (before tax) was EUR 10 million positive (2018: EUR 11 million positive). Changes in fair value due to own credit risk are recognised through other comprehensive income. These changes are determined by comparing the valuation using the relevant funding curve including a mark-up for 'own credit risk' and the valuation using the relevant funding curve without this mark-up. Note 25 explains the changes in value recognised through the income statement.

16 Derivatives

This balance sheet item includes the negative fair value of derivatives not settled-to-market. Note 25 explains the changes in fair value recognised through the income statement.

	31/12/2019	31/12/2018
Derivatives not involved in a hedge accounting relationship	1,004	819
Derivatives involved in a portfolio hedge accounting relationship	20,249	15,586
Derivatives involved in a micro hedge accounting relationship	1,393	2,818
Payables related to STM derivatives contracts	5	
Total	22,651	19,223

17 Taxes

The bank has registered deferred tax liabilities for the actuarial results for the employee benefits provision, for the revaluation reserve for financial assets at fair value through equity, own credit adjustment, hybrid capital and for the cash flow hedge reserve, which all directly change into equity.

	31/12/2019	31/12/2018
Current tax assets	29	8
Deferred tax liabilities	-78	-99
Total	-49	-91

BNG Bank and the Dutch tax authorities have concluded a bilateral agreement ('vaststellingsovereenkomst') in 2018 in accordance with IFRS 9, for the period 2018-2020. The bilateral agreement applies to the BNG Bank fiscal unit. Pursuant to the agreement, all financial instruments are stated - for both reporting and tax purposes - in accordance with the IFRS principles of valuation, with the exception of transactions classified as Financial assets at fair value through the income statement. All transactions within this category are valued for tax purposes at the lower of either the cost price or the market value. The result for tax purposes differs from the result for reporting purposes if, on balance, unrealised losses have arisen. If the revaluation reserve increases, the positive amount is added to the annual profit for tax purposes up to the level at which the cost price is reached.

The reconciliation between the effective tax rate and the nominal tax rate is as follows:

	2019	2018
Nominal and effective tax rate		
Profit before tax	227	459
Tax levied at the nominal tax rate	-57	-114
Tax adjustment from previous years	0	0
Participation exemption	0	0
Non-deductible interest on hybrid capital	-	-
Non-deductible costs (bank levy)	-7	-8
Effective tax	-64	-122
Nominal tax rate	25.0%	25.0%
Effective tax rate	28.2%	26.6%

Due to expected changes in the nominal tax rate as from 2021, the deferred taxes are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled.

	2019			
	OPENING BALANCE	CHANGES THROUGH EQUITY	CHANGES THROUGH THE INCOME STATEMENT	CLOSING BALANCE
Changes in deferred taxes				
Fiscal treatment opening balance sheet	0	-	-	0
Financial assets at fair value through other comprehensive income	-32	8	-	-24
Cash flow hedge reserve	-62	9	-	-53
Own Credit Adjustment	-2	0	-	-2
Hybrid capital	-4	4	-	0
Employee benefits provision	1	-	0	1
Total	-99	21	0	-78

	2018			
	OPENING BALANCE	CHANGES THROUGH EQUITY	CHANGES THROUGH THE INCOME STATEMENT	CLOSING BALANCE
Changes in deferred taxes				
Fiscal treatment opening balance sheet	0	-	-	0
Financial assets available-for-sale	-102	102	-	-
Financial assets at fair value through other comprehensive income	-	-32	-	-32
Cash flow hedge reserve	-65	3	-	-62
Own Credit Adjustment	-3	1	-	-2
Hybrid capital	-4	0	-	-4
Employee benefits provision	1	-	0	1
Total	-173	74	0	-99

18 Debt securities

This includes bonds and other issued debt securities with either fixed or variable interest rates. Any unsold portion of an issue is deducted from the relevant bond.

	31/12/2019	31/12/2018
Bond loans	94,374	89,531
Commercial Paper	9,333	5,323
Privately placed debt securities	8,954	8,868
Total	112,661	103,722

19 Funds entrusted

	31/12/2019	31/12/2018
Current account balances	2,433	2,193
Short-term deposits	25	91
Long-term deposits	3,108	3,502
Total	5,566	5,786

20 Subordinated debt

	31/12/2019	31/12/2018
Subordinated debt	33	32
Total	33	32

21 Other liabilities

	31/12/2019	31/12/2018
Employee benefits provision	2	2
Other liabilities	56	74
Total	58	76

The employee benefits provision is made up of two parts, a provision for the interest rate discount on mortgage loans to both active and retired employees of EUR 1 million (2018: EUR 1 million) and a provision for vitality leave of EUR 1 million (2018: EUR 1 million). Both provisions have a long-term character.

The movements in the present value of the net liability in relation to the defined benefits relating to the mortgage interest rate discount and the provision for vitality leave are as follows:

	2019	2018
Employee benefits provision		
Net liability as at 1 January	2	2
Movements in the provision	0	0
Net liability as at 31 december	2	2

The other liabilities are mainly composed of amounts payable related to derivatives and lending to clients.

22 Equity

Since BNG Bank has no minority interests after consolidation, the entire consolidated equity, excluding hybrid capital, is attributable to shareholders. The items included in equity are explained below.

	31/12/2019	31/12/2018
Share capital	139	139
Share premium reserve	6	6
Revaluation reserve	84	125
Cash flow hedge reserve	13	10
Own credit adjustment	8	9
Cost of hedging	174	222
Reserve for fair value increases	129	83
Retained Earnings	3,438	3,327
Unappropriated profit	163	337
Equity attributable to shareholders	4,154	4,258
Hybrid capital	733	733
Total	4,887	4,991

	2019	2018
Number of paid-up shares outstanding	55,690,720	55,690,720
Proposed dividend per share in euros	1.27	2.85
Proposed dividend		
- Primary dividend pursuant to the Articles of Association	7	7
- Proposed dividend above the primary dividend	64	152
Total	71	159

The proposed dividend distribution for 2019 takes into account the EUR 25 million dividend (before tax) that has already been paid on the hybrid capital in 2019. This payment was charged to the Retained earnings.

Share capital

The authorised capital is divided into 100 million shares with a nominal value of EUR 2.50 each, of which 55,690,720 shares have been issued and fully paid up. The number of shares in circulation remained unchanged during the financial year. There are no issued shares that are not fully paid up. BNG Bank and its subsidiaries hold no company shares. None of the shares carry preferential rights, nor are they subject to restrictions. There are no options that can be exercised to obtain entitlement to the issue of shares.

Share premium reserve

There were no movements in 2019 and 2018.

Revaluation reserve

At year-end 2019 the revaluation reserve includes EUR 161 million (2018: 292 million) in unrealised value changes, excluding the value of the hedged part of the interest-rate risk of interest-bearing securities involved in hedge accounting, which are recognised in the Financial assets at fair value through other comprehensive income. The revaluation reserve has been adjusted for taxes. Upon the sale of these assets, the associated cumulative result recognised in equity is transferred to the income statement.

Cash flow hedge reserve

The effective portion of the unrealised changes in the value of derivatives involved in a cash flow hedge relationship, resulting from changes in the foreign exchange rates, are recognised in the cash flow hedge reserve. The cash flow hedge reserve is adjusted for taxes.

Own credit adjustment

The Own Credit Adjustment amounts to EUR 8 million net of taxes (2018: EUR 9 million). This adjustment relates to changes in credit risk of financial liabilities measured at fair value through the income statement.

Cost of hedging reserve

The cost of hedging reserve records movements in foreign currency basis spreads in crosscurrency swaps involved in hedge accounting and is amortised over the life of the hedge. The cumulative movements will reduce to nil by maturity of the hedging instrument.

Retained earnings

After determination of the appropriations of the distributable profit pursuant to the Articles of Association, the General Meeting of Shareholders decides which portion of the remaining profit is added to the Retained earnings. In 2019, a dividend of EUR 159 million (2018: EUR 141 million) was paid out to the bank's shareholders, charged to the Retained earnings. EUR 25 million (before tax) was distributed to the holders of the hybrid capital in 2019 (2018: EUR 25 million), charged to the Retained earnings. The Retained earnings include a share premium related to hybrid capital of EUR 0.1 million in total (2018: EUR 0.1 million).

Unappropriated profit

The balance sheet is prepared prior to profit appropriation. This item represents the total result achieved after deduction of corporate income tax.

Hybrid capital

The bank's hybrid capital amounts to EUR 733 million. In 2019 no additional hybrid capital was issued. Hybrid capital concerns perpetual loans involving an annual non-cumulative discretionary payment on the outstanding principal amount, subject to compulsory amortisation in the event that the CET1 ratio falls below 5.125%. The payment qualifies as dividend under IFRS and is charged to the Retained earnings. The dividend which are paid during 2019 are not deductible for corporate income anymore.

The instruments are structured in line with CRR requirements and the EBA guidelines and qualifies as additional Tier 1 capital. BNG Bank has the unilateral contractual option of repaying the perpetual capital instruments prematurely on the sixth coupon due date (in May 2021 and 2022) and subsequently every year on the coupon due date.

23 Interest result

Interest revenue calculated by using the effective interest method includes all positive interest results from both traditional financial instruments and derivatives involved in hedge accounting, including negative interest expenses on financial liabilities. In addition, other credit-related income received is included in this item. Interest revenues on assets that were subject to impairment are recognised on the original effective interest percentage, as long as the expected interest cash flows are received.

Interest expenses calculated by using the effective interest method include all negative interest results from both traditional financial instruments and derivatives involved in hedge accounting, including negative interest revenue on financial assets. The costs of borrowing as well as other interest-related charges are also recognised.

Other interest revenue and expenses consist mainly of interest results of derivatives not involved in hedge accounting and interest results of financial assets and liabilities measured at fair value.

	2019	2018
Interest revenue		
Interest revenue calculated by using the effective interest method:		
- Financial assets at amortised cost	2,147	2,252
- Financial assets at fair value through other comprehensive income	143	182
- Derivatives involved in hedge accounting	2,561	2,673
- Negative interest expenses on financial liabilities	36	44
	4,887	5,151
Other interest revenue:		
- Financial assets designated at fair value through the income statement	42	47
- Financial assets mandatory at fair value through the income statement	3	3
- Derivatives not involved in hedge accounting	588	516
- Other	0	-
	633	566
Total interest revenue	5,520	5,717

Continued on next page

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Interest expenses

Interest expenses calculated by using the effective interest method:

- Financial liabilities at amortised cost
- Derivatives involved in hedge accounting
- Negative interest expenses on financial assets

Other interest expenses

- Financial liabilities designated at fair value through the income statement
- Derivatives not involved in hedge accounting
- Other

Total interest expenses

Total interest result

	2019	2018
2,414	2,368	
2,429	2,705	
149	104	
	4,992	5,177
31	64	
58	36	
5	7	
	94	107
5,086	5,284	
434	433	

The interest revenue in 2019 includes EUR 2 million (2018: EUR 1 million) in interest revenue for financial assets, relating to Financial assets at amortised cost (notes 7 and 8) and Financial assets at fair value through other comprehensive income (note 6), which were subject to impairment.

24 Commission result

Commission income

This item includes income from services provided to third parties.

	2019	2018
Income from loans and credit facilities	23	21
Income from payment services	9	9
Total	32	30

Commission expenses

This item comprises expenses totalling EUR 2 million (2018: EUR 2 million) relating to services rendered by third parties in relation to loans, credit facilities and payment services.

25 Result on financial transactions

This item includes the result on financial transactions broken down into realised and unrealised market value adjustments.

	2019	2018
Market value changes in financial assets at fair value through the income statement resulting from changes in credit and liquidity spreads, consisting of:		
- Interest-bearing securities	29	11
- Structured loans	0	-2
	29	9
Result on hedge accounting		
- Portfolio fair value hedge accounting	-28	18
- Micro fair value hedge accounting	38	-2
- Micro cash flow hedge accounting	-2	-2
	8	14
Change in counterparty credit risk of derivatives (CVA/DVA)	-10	12
Realised sales and buy-out results	21	36
Other market value changes	-11	40
Total	37	111

Also in 2019, the result on financial transactions was positively affected by realised and unrealised results. The realised results of EUR 21 million (2018: 36 million) were mainly related to sales of interest-bearing securities out of the liquidity portfolio. The unrealised results amounted to EUR 16 million (2018: 75 million). The reduced credit and liquidity risk spreads of most interest-bearing securities recorded under Financial assets at fair value through the income statement led to a positive result of EUR 29 million (2018: 11 million). The unrealised results were also positively affected by a decline in counterparty credit risk of derivatives, while the result on hedge accounting and other market value changes had a negative impact on the total result on financial transactions. The other market value changes also include the effects of movements in the USD/EUR and EUR/GBP cross-currency basis spreads of derivatives not involved in a hedge accounting relationship.

26 Results from participating interests

	2019	2018
Associates	1	0
Subsidiaries	-3	1
Total	-2	1

For a description of the bank's associates and joint ventures, please refer to section 'Associates and joint ventures' in the consolidated financial statements.

27 Staff costs

	2019	2018
Wages and salaries	27	26
Pension costs	4	4
Social security costs	3	3
Additions to the employee benefits provision	-	-
Other staff costs	5	6
Total	39	39

The variable remuneration of individual staff members in 2019 was maximized at 20% of their fixed salary (2018: 20%).

28 Other administrative expenses

These expenses include, among other things, outsourcing costs, maintenance costs of property and equipment, printing costs, training expenses and advertising expenses. The total other administrative expenses for 2019 amounted to EUR 37 million (2018: EUR 32 million).

29 Depreciation

A breakdown of this item is included in the note on Property and equipment (note 11). In total, the depreciation charges amounted to EUR 3 million in 2019 (2018: EUR 3 million).

30 Impairments

The impairments in 2019 amounted to a loss of EUR 153 million in the income statement (2018: EUR 2 million profit).

	2019			
	STAGE 1	STAGE 2	STAGE 3	TOTAL
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	3	3	0	6
- Decreases in allowances due to derecognition	-2	-4	0	-6
- Changes in allowances due to changes in credit risk (net)	1	4	148	153
	2	3	148	153
Impairment results not due to movements in allowances:				
- Reversal of impairment due to cash flows received from past write-offs				0
- Impairments due to write-offs			0	0
	0	0	0	0
Net impairment result on financial assets	2	3	148	153
	2018			
	STAGE 1	STAGE 2	STAGE 3	TOTAL
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	4	8	0	12
- Decreases in allowances due to derecognition	-3	-9	-4	-16
- Changes in allowances due to changes in credit risk (net)	0	4	-1	3
	1	3	-5	-1
Impairment results not due to movements in allowances:				
- Reversal of impairment due to cash flows received from past write-offs			0	0
- Impairments due to write-offs			-1	-1
	-	-	-1	-1
Net impairment result on financial assets	1	3	-6	-2

Movement in allowances for expected credit losses

Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	3	3	0	6
- Decreases in allowances due to derecognition	-2	-4	0	-6
- Changes in allowances due to changes in credit risk (net)	1	4	148	153
Total movements in allowances	2	3	148	153

Movements in allowances not taken through the income statement:

- Decreases in allowance due to write-offs

2019			
STAGE 1	STAGE 2	STAGE 3	TOTAL
3	3	0	6
-2	-4	0	-6
1	4	148	153
2	3	148	153

Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	4	8	0	12
- Decreases in allowances due to derecognition	-3	-9	-4	-16
- Changes in allowances due to changes in credit risk (net)	0	4	-1	3
	1	3	-5	-1
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs			-8	-8
	0	0	-8	-8
Total movements in allowances	1	3	-13	-9

2018				
STAGE 1	STAGE 2	STAGE 3	TOTAL	
4	8	0	12	
-3	-9	-4	-16	
0	4	-1	3	
1	3	-5	-1	
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs		-8	-8	
	0	-8	-8	
Total movements in allowances	1	3	-13	-9

Note 33 provides an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2019.

The changes in the incurred loss provision are included in the Loans and advances item (Note 8).

31 Contribution to resolution fund and bank levy

The European resolution regime arising from the Bank Recovery and Resolution Directive entered into force on 1 January 2015. The expenses for the resolution fund are deductible for corporate income tax purposes. The EUR 8 million payable for 2019 (2018: EUR 12 million) was paid in June 2019 and charged to the income statement.

The expenses concerning the bank levy are not deductible for corporate income tax purposes. As a consequence, the effective tax burden exceeds the nominal tax burden. BNG Bank is due to pay the bank levy in October of every year, which for 2019 amounted to EUR 30 million (2018: EUR 31 million).

	2019	2018
	basis 2018	basis 2017
Balance sheet total	137,509	140,025
Less: Tier 1 capital	4,614	4,518
Less: Deposits covered by the deposit-guarantee scheme	51	43
Taxable base	132,844	135,464
Less: Efficiency exemption	20,900	20,900
Taxable base	111,944	114,564
Total sum of debts with a maturity of less than one year	28,792	33,152
Total sum of all debts, according to the balance sheet	132,518	135,072
Bank levy on short-term debt	11	12
Bank levy on long-term debt	19	19
Total calculated/due	30	31

32 Fees of independent auditors

The following audit fees were reported in the income statement:

	2019	2018
Audit of the financial statements	329	309
Other audit services	258	285
Tax services	-	-
Other non-audit services	10	9
Total	597	603

The fees listed above relate to the procedures applied to the Company and its consolidated group entities by accounting firms and external independent auditors as referred to in

Section 1, subsection 1 of the Audit Firms Supervision Act ('Wet toezicht accountantsorganisaties - Wta'). In the case of BNG Bank this is only applicable to Dutch based accounting firms (PwC the Netherlands accountants ('PwC NL'), including its tax services and advisory groups) as BNG Bank does not make use of foreign based accounting firms. The audit fees relate to the audit of the 2019 financial statements, regardless of whether the work was performed during the financial year.

Summary of services rendered by the independent auditor, in addition to the audit of the financial statements

Our independent auditor, PwC NL, has rendered, for the period to which our statutory audit relates, in addition to the audit of the statutory financial statements the following services to the company and its controlled entities:

Other audit services required by law or regulatory requirements

- Statutory audits of controlled entities;
- Review of interim financial statements;
- Audit of the regulatory returns for the Dutch Central Bank;
- Assurance engagement credit claims for the Dutch Central Bank.

Other audit services

- Assurance engagement on the sustainability report;
- Comfort letters on annual update of debt issuance prospectus and drawdowns under the debt issuance programme.

Other non-audit services

- Agreed-upon procedure on the financial information for the Single Resolution Board.

33 Impairment of financial assets and off-balance sheet commitments

Breakdown of financial assets and off-balance sheet commitments into impairment stages

The following tables provide a breakdown of the financial assets subject to impairment and off-balance sheet commitments into the 3 impairment stages:

Stage 1: performing exposures without significant increase in credit risk (SICR) since initial recognition.

Stage 2: performing exposures with significant increase in credit risk since initial recognition (not credit-impaired).

Stage 3: non-performing exposures (credit-impaired).

Financial assets subject to impairment		31/12/2019					
CARRYING AMOUNT	GROSS CARRYING AMOUNT			ALLOWANCE FOR CREDIT LOSS			NON-PERFORMING
	PERFORMING	NON-PERFORMING	STAGE 1	STAGE 2	STAGE 3	PERFORMING	
Cash and balances held with central banks	1,272	1,272					
Amounts due from banks	66	66				0	0
Cash collateral posted	14,643	14,643					
Financial assets at fair value through OCI ¹	9,222	9,166	56			0	-1
Interest-bearing securities at amortised cost	7,764	7,665	105			-1	-5
Loans and advances	88,249	86,712	1,440	288		-5	-31
Total	121,216	119,524	1,601	288		-6	-37
							-155

Financial assets subject to impairment		31/12/2018					
CARRYING AMOUNT	GROSS CARRYING AMOUNT			ALLOWANCE FOR CREDIT LOSS			NON-PERFORMING
	PERFORMING	NON-PERFORMING	STAGE 1	STAGE 2	STAGE 3	PERFORMING	
Cash and balances held with central banks	1,587	1,587					
Amounts due from banks	82	82	0			0	0
Cash collateral posted	12,043	12,043					
Financial assets at fair value through OCI ¹	9,648	9,595	53			0	-1
Interest-bearing securities at amortised cost	7,406	7,319	94			-1	-6
Loans and advances	85,002	83,634	1,360	54		-4	-27
Total	115,768	114,260	1,507	54		-5	-34
							-15

¹ The allowance for credit loss for financial assets at FVOCI is included in OCI and not in the (net) carrying amount.

Off-balance sheet commitments		31/12/2019						
		NOMINAL AMOUNT			PROVISION			NON-PERFORMING
		PERFORMING	NON-PERFORMING	STAGE 1	STAGE 2	STAGE 3	PERFORMING	
Contingent liabilities		59	1			0	0	0
Revocable facilities		3,637	126	8		0	0	0
Irrevocable facilities		7,014	113	24		-1	-1	-3
Total		10,710	240	32		-1	-1	-3

Off-balance sheet commitments		31/12/2018						
		NOMINAL AMOUNT			PROVISION			NON-PERFORMING
		PERFORMING	NON-PERFORMING	STAGE 1	STAGE 2	STAGE 3	PERFORMING	
Contingent liabilities		31	1			0	0	0
Revocable facilities		6,022	35			0	0	0
Irrevocable facilities		7,504	120			-1	-1	-1
Total		13,557	156	0		-1	-1	0

Movements in allowances and provisions for expected credit losses

The following table shows the movements in allowances for expected credit losses for financial assets and the provision for expected credit losses for off-balance sheet commitments.

		2019				
		INCREASES DUE TO ORIGINA- TION AND OPENING BALANCE	DECREASE DUE TO DERECOG- NITION REPAY- MENTS AND DISPOSALS	DECREASE CHANGES DUE TO CHANGE IN CREDIT RISK (NET)	DECREASE IN ALLOW- ANCE ACCOUNT DUE TO WRITE- OFFS	CLOSING BALANCE
Allowances						
Cash and balances held with central banks		-	-	-	-	0
Amounts due from banks		0	0	0	0	0
Financial assets at fair value through OCI		1	0	0	0	1
Interest-bearing securities at amortised cost		7	0	-2	1	6
Loans and advances		46	5	-3	148	-5
		54	5	-5	149	-5
						198
Provision						
Off-balance sheet commitments			2	1	-1	3
						5

2018						
		INCREASES DUE TO ORIGINA- TION OPENING BALANCE	DECREASE DUE TO DERECOGNI- TIO N REPAY- MENTS AND DISPOSALS	CHANGES DUE TO CHANGE IN CREDIT RISK (NET)	DECREASE IN ALLOWANCE ACCOUNT DUE TO WRITE-OFFS	CLOSING BALANCE
Allowances						
Cash and balances held with central banks		-	-	-	-	0
Amounts due from banks		0	0	0	0	0
Financial assets at fair value through OCI		1	0	0	0	1
Interest-bearing securities at amortised cost		13	2	-1	1	-8
Loans and advances		50	8	-13	1	-
		64	10	-14	2	-8
						54
Provision						
Off-balance sheet commitments			2	2	-2	0
						2

Other notes

For the details on other items, please refer to the notes to the consolidated financial statements. For the other notes, please refer to the sections started as from page 218 of this document.

6.3 Other information

Independent auditor's report

To: the general meeting and supervisory board of BNG Bank N.V.

Report on the financial statements 2019

Our opinion

In our opinion, the financial statements of BNG Bank N.V. ('the Company') give a true and fair view of the financial position of the Company and the Company together with its subsidiaries ('the Group') as at 31 December 2019, and of its result and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code.

What we have audited

We have audited the accompanying financial statements 2019 of BNG Bank N.V., Den Haag. The financial statements include the consolidated financial statements of the Group and the company financial statements.

The financial statements comprise:

- the consolidated and company statement of balance sheet as at 31 December 2019;
- the following statements for 2019: the consolidated and company income statement, the consolidated and company statements of comprehensive income, changes in equity and cash flows; and
- the notes, comprising the significant accounting policies and other explanatory information.

The financial reporting framework applied in the preparation of the financial statements is EU-IFRS and the relevant provisions of Part 9 of Book 2 of the Dutch Civil Code.

The basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. We have further described our responsibilities under those standards in the section 'Our responsibilities for the audit of the financial statements' of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of BNG Bank N.V. in accordance with the European Regulation on specific requirements regarding statutory audit of public-interest entities, the 'Wet toezicht accountantsorganisaties' (Wta, Audit firms supervision act), the 'Verordening inzake de onafhankelijkheid van accountants bij assuranceopdrachten' (ViO - Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence requirements in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA - Dutch Code of Ethics).

Our audit approach

Overview and context

BNG Bank N.V. is a credit institution licensed in the Netherlands. Its main activity is providing financing to the Dutch public sector and the semi-public domain. The Group is comprised of several components and therefore we considered our group audit scope and approach as set out in the section 'The scope of our group audit' of our report. We paid specific attention to the areas of focus driven by the operations of the Group, as set out below.

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where the executive board made important judgements, for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. In the paragraph 'Accounting estimates and judgements' in the financial statements, the Group describes the areas of judgement in applying accounting policies and the key sources of estimation uncertainty. Given the significant estimation uncertainty and the related higher inherent risks of material misstatement in the impairment of loans and receivables, the application of hedge accounting and the valuation of financial instruments, we considered these matters as key audit matters as set out in the section 'Key audit matters' of our report.

Given the importance of IT for the Company we have, to the extent relevant to our audit, paid specific attention to the IT general controls, which comprise the policies and procedures to ensure reliable automated processing of information used for financial reporting purposes, including management of cybersecurity risks. The Company has outsourced a larger part of its IT activities to Centric FSS. The outsourcing has implications for our audit as set out in the section 'The scope of our group audit' of our report. We ensured that the audit team included the appropriate skills and competences which are needed for the audit of a banking institution. We therefore included specialists in the areas of banking activities, IT, tax, valuation of financial instruments and hedge accounting in our team.

The outline of our audit approach was as follows:

Materiality

- Overall materiality: € 11.4 million.

Audit scope

- We conducted audit work on BNG Bank and both of its subsidiaries BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel.
- For our audit on the valuation of participations held by BNG Gebiedsontwikkeling B.V. we made use of the work performed by a component auditor.
- In our assessment of the IT landscape we made use of the ISAE 3402 type 2 report of Centric FSS.

Key audit matters

- Impairment of loans and receivables
- Application of hedge accounting
- Valuation of financial instruments

Materiality

The scope of our audit is influenced by the application of materiality, which is further explained in the section 'Our responsibilities for the audit of the financial statements' of our report.

Based on our professional judgement we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and to evaluate the effect of identified misstatements, both individually and in aggregate, on the financial statements as a whole and on our opinion.

Overall group materiality

€ 11.4 million (2018: € 22.9 million).

Basis for determining materiality

We used our professional judgement to determine overall materiality. As a basis for our judgement we used 5% of profit before tax.

Rationale for benchmark applied

We used profit before tax as the primary benchmark, a generally accepted auditing practice, based on our analysis of the common information needs of users of the financial statements. On this basis, we believe that profit before tax is an important metric for the financial performance of the Group.

Component materiality

BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel B.V. were audited to a local statutory audit materiality that was less than our overall group materiality.

We also take misstatements and/or possible misstatements into account that, in our judgement, are material for qualitative reasons.

We agreed with the supervisory board that we would report to them misstatements identified during our audit above € 0.6 million (2018: € 1.1 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

The scope of our group audit

BNG Bank N.V. is the parent company of a group with BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel B.V. as its 100% subsidiaries. The financial information of these subsidiaries is included in the consolidated financial statements of BNG Bank N.V. All consolidated positions and transactions in the financial statements were in scope of our audit.

We tailored the scope of our audit to ensure that we performed sufficient work to be able to give an opinion on the financial statements as a whole, taking into account the management structure of the Group, the nature of operations of its components, the accounting processes and controls, and the markets in which the components of the Group operate. In establishing the overall group audit strategy and plan, we determined the type of work required to be performed at the statutory level and in doing so, we ensured that we obtained sufficient coverage across the Group. The statutory audits of BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel B.V. were performed by the group audit team.

In our audit of the valuation of participations held by BNG Gebiedsontwikkeling B.V. we made use of the work performed by a component auditor. We determined the level of involvement we needed to have in the audit work to be able to conclude on whether sufficient and appropriate audit evidence has been obtained as a basis for our opinion on the consolidated financial statements as a whole. We have sent specific instructions to the component auditor, held meetings with them and performed a file review of the audit file of the component auditor.

The Company has outsourced the largest part of its IT activities and payment services to Centric FSS. In our assessment of the IT landscape, we made use of the ISAE 3402 Type 2 report of Centric FSS. In this context, we have been involved in planning the ISAE 3402 work by the service-provider auditor of Centric FSS, discussed progress and interim findings of the audit and, finally, evaluated the ISAE 3402 assurance report once it was finalised. Based on these procedures performed, we conclude that in the context of our audit of the financial statements of BNG Bank N.V., we could rely on the ISAE 3402 Type 2 assurance report of Centric FSS.

By performing the procedures above at components, combined with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence on the Group's financial information, as a whole, to provide a basis for our opinion on the group financial statements.

Our focus on the risk of fraud and non-compliance with laws and regulations

Fraud

The objectives of our audit, in respect to fraud are:

- to identify and assess the risks of material misstatement of the financial statements due to fraud;
- to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement due to fraud, through designing and implementing appropriate audit responses; and
- to respond appropriately to fraud or suspected fraud identified during the audit.

As in all of our audits, in assessing the risks of material misstatement in the financial statements, we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the executive board that may represent a risk of material misstatement due to fraud. We evaluated the design and the implementation and, where considered appropriate, tested the operating effectiveness of internal controls that mitigate fraud risks, performed data analysis of high-risk journal entries and evaluated key estimates and judgements for bias by the Company, and finally we incorporated elements of unpredictability in our audit. We refer to our key audit matters on our approach related to key areas with higher risk due to accounting estimates where management makes significant judgements.

The primary responsibility for the prevention and detection of fraud lies with the executive board with the oversight of the supervisory board.

Laws and regulations

There is an industry risk that emerging compliance or litigation areas have either not been identified or addressed by management for financial statement purposes. This includes the consideration whether there is a need for the recognition of a provision or a contingent liability disclosure on the future outcome of legal or regulatory processes.

The objectives of our audit, in respect to non-compliance with laws and regulations are:

- to identify and assess the risk of material misstatement of the financial statements due to non-compliance with laws and regulations; and
- to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether due to fraud or error when considering the applicable legal and regulatory framework.

In line with Standard 250 in our audit approach we made a distinction between those laws and regulations which:

- Have a direct effect on the determination of material amounts and disclosures in the financial statements. For this category we have obtained audit evidence regarding compliance with the provision of those laws and regulations; and
- Does not have a direct effect on the determination of material amounts and disclosures in the financial statement, but where compliance may be fundamental to the operating aspects of the business, to the Company's ability to continue its business or to avoid material penalties. For this category, we performed specific audit procedures to identify non-compliance with those laws and regulations that may have a material effect on the financial statements.

We identified that the risk of non-compliance with laws and regulations relates mainly to the laws and regulations which have an indirect impact on the financial statements, such as the Anti-Money Laundering and Anti-Terrorist Financing Act (Wwft) (including regulations on Anti-Money Laundering (AML) Client Due Diligence (CDD)), Markets in Financial Instruments Directive II (MiFID II), transaction reporting and General Data Protection Regulation (GDPR). The primary responsibility for the prevention and detection non-compliance with laws and regulations lies with the executive board with the oversight of the supervisory board.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements. We have communicated the key audit matters to the supervisory board. The key audit matters are not a comprehensive reflection of all matters identified by our audit and that we discussed. In this section, we described the key audit matters and included a summary of the audit procedures we performed on those matters.

We addressed the key audit matters in the context of our audit of the financial statements as a whole, and in forming our opinion thereon. We do not provide separate opinions on these matters or on specific elements of the financial statements. Any comment or observation we made on the results of our procedures should be read in this context. Compared to prior year we did not include any new key audit matters as we did not come across any new significant transactions or developments that were considered a key audit matter.

Key audit matter	Our audit work and observations
<p>Impairment of loans and receivables</p> <p>Refer to the accounting principle 'Impairment of financial assets' note 31 'Net impairment losses on financial assets' and note 37 'Impairment of financial assets and off-balance sheet commitments' in the consolidated financial statements</p> <p>The lending to clients classified as loans and advances measured at amortized cost amounts to €88 billion as at 31 December 2019. Most of the loan portfolio relates to loans that are guaranteed by a (central) government body or by the WSW or Wfz guarantee funds. The credit risk inherent in this category is limited as explained in the risk section in the financial statements. Therefore, the expected credit loss on these loans is considered low. However, the Company also has an unguaranteed loan portfolio amounting to €8 billion that has a higher risk of impairments. The impairment provision for loans and advances as per 31 December 2019 is €193 million and the net impairment charge for loans and advances recognized in 2019 in the income statement amounts to</p>	<p>Evaluating accounting policy choices: We evaluated how management applied IFRS 9 to determine whether it has been set up in accordance with the requirements included in the standard. We challenged management on their judgement in key accounting policy choices in the areas of what is considered to be a SICR, application of the low credit risk exemption and default definitions. We considered the policy choices in the application of IFRS 9 to be reasonable.</p> <p>Assessing individual exposures: For a sample of loans for which management concluded that no SICR occurred, we assessed whether there were any indications of increases in credit risk, for example by determining that there are no significant arrears in payments, take notice of the latest internal annual creditworthiness assessment and evaluation of latest financial information of counterparties. Our procedures did not return any different outcomes compared to management.</p>

Continued on next page

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Key audit matter

€153 million. This net impairment charge in 2019 is mainly driven by the financial problems of an obligor that provides services to municipalities.

Areas of estimation uncertainty and management

judgment: In determining the expected credit losses for loans and advances, management has to apply judgment in a number of areas. Amongst others this applies to the choices and judgement made in the impairment methodology such as determining what is considered a significant increase in credit risk (SICR), what forward looking macro-economic information is relevant to measure expected credit losses for loans and receivables and managements estimates of probabilities of default and loss given default.

Models and assumptions: To calculate expected credit losses for stage 1 and 2, the executive board estimated the probability of default (PD) and the loss given default (LGD) and the exposure at default (EAD). The Company's loan portfolio has a low default character and as a result, there is limited internal historical data to support and back-test the applied PDs and LGDs. Management used its internally developed credit rating models to estimate the PD for exposures for which no external rating is available. Given the low default character of the Company's loan portfolio the rating models were considered expert models and required a high degree of judgement to stratify clients in rating classes.

Also with respect to the LGD used in the calculation of expected credit losses, the executive board has applied significant judgement. The Company applies a basic flat LGD percentage based on the limited available historic default information.

For credit-impaired loans, the impairment allowance is based on the weighted average of the net present value of expected future cash flows (including forward looking information and the valuation of underlying collateral) in three different scenarios.

Continued on next page

Our audit work and observations

For credit-impaired loans (in particular the exposure on the obligor that significantly impacted the 2019 profit of BNG Bank), we evaluate the feasibility of the forecasted cash flows for each scenario and assessed management's analysis of the probability allocation of each individual scenario for each credit-impaired loan. In evaluating the forecasted cash flows we evaluated the values that management attributed to expected cash flows and available collateral to assess that this represents a best estimate.

Evaluating internal credit rating models: With respect to the internal credit rating models used we evaluated the model governance procedures, credit modelling monitoring performed by risk management, reasonableness of the methodology and overlays for macro-economic scenarios applied in determining the credit rating.

Management engaged with external experts to validate their internal credit rating models. As part of our audit procedures, amongst others, we evaluated the competence, capability and objectivity of these external experts. Furthermore, we obtained the reports issued by these external experts that summarise the procedures performed, the evidence obtained, and conclusions reached. We discussed and evaluated these reports with the Company's internal model owners and external experts. We also assessed the external expert's conclusions to conclude that the internal credit rating models are fit for purpose and that their recommendations have no material impact on the expected credit loss calculation. We did not identify any indicators of possible management bias in determining internal credit ratings and corresponding PD's.

With respect to the forward looking macro-economic information we challenged on how the inputs for the various models were determined and to the extent possible compared this to external market data.

With respect to the LGD used in the calculation of expected credit losses, we challenged management's evaluation of the limited available historic information and the assumptions applied therein.

Continuation of previous page

Key audit matter

Given the complexity and judgement required to calculate the impairments of loans and advances and the impact it might have on results, this area is subject to a higher risk of material misstatement. In particular, since the 2019 profit of BNG Bank was significantly impacted by the high impairment charges. Therefore, we have identified the impairment of loans and advances as a key audit matter in our audit.

Application of hedge accounting

Refer to the accounting policy 'Hedge accounting' and the disclosure note 'hedging of risks with derivatives' in the consolidated financial statements

The Company enters into derivatives to hedge its interest rate risk and variability in cash flows. By applying hedge accounting, the results of the hedged item and the hedging instrument are recognized simultaneously in the income statement to neutralise the impact on the result, to the extent the hedging relationship is effective.

The Company applies micro fair value hedge accounting to hedge interest rate risks and micro cash flow hedge accounting to hedge the risk resulting from variability in cash flows as a result of cross-currency fluctuations. For interest rate risk the Company applies micro fair value hedging as well as portfolio fair value hedge accounting. We consider portfolio hedge accounting to be more complex in nature as compared to micro hedge accounting have therefore determined portfolio hedge accounting to be a key focus area in our 2019 audit.

Use of models: The Company has developed specific models for calculating hedge effectiveness for portfolio hedge accounting. The determination of the effectiveness is technically complex. As per management's assessment, portfolio hedge accounting for BNG Bank N.V. has been highly effective in recent years.

Requirements to apply hedge accounting: To apply hedge accounting, the Company must meet the EU-IFRS requirements for portfolio hedge accounting as included in IAS 39. These include amongst others:

- Documentation of hedging relationships in formal hedge documentation;

Continued on next page

Our audit work and observations

Internal controls: Our audit work included, amongst others, understanding, evaluating and testing the design and operating effectiveness of controls relating to the documentation and review of the portfolio hedge relationship, including testing the hedge ineffectiveness by management. Based on this work, we concluded that, to the extent relevant to our audit, we could rely on these controls for the purpose of our audit.

Evaluation models and valuation methodology: We tested the models used by BNG Bank N.V. for calculating hedge effectiveness for portfolio hedging. Furthermore, as part of our audit procedures we also tested management's effectiveness calculations and no exceptions were noted.

Evaluating compliance with EU-IFRS: With respect to the documentation supporting the portfolio hedge accounting relationship, we verified that hedge documentation complied with the requirements of EU-IFRS. We found no exceptions in our test.

Continuation of previous page

Key audit matter

- Validating that the hedge accounting relationship meets all of the hedge effectiveness requirements of IAS 39.

Given the technical and complex requirements for the application of portfolio hedge accounting and that incorrect application of these requirements could have a material impact on the result and equity, we have considered this to be a key audit matter in our audit.

Valuation of financial instruments

Refer to the accounting policy 'fair value of financial instruments' and the disclosure note 'fair value of financial instruments' in the consolidated financial statements

The Company has financial instruments on its balance sheet that are measured at fair value through the income statement. The portfolio consists of €1,221 million of financial assets classified as level 2 and €441 million as level 3. Financial liabilities measured at fair value through the income statement classified as level 2 are in total €561 million as per 31 December 2019. The derivative portfolio with a fair value of €10,004 million recorded as assets and €22,651 million recorded as liabilities contains for >99% level 2 and <1% level 3 instruments.

Level 2 financial instruments: For financial instruments classified as level 2 management estimates the fair value by using discounted cash flow models, option pricing models, modelling of double default effects and other valuation techniques. Judgement is required in determining the valuation model and policy. For level 2 instruments, management uses observable inputs to determine forward curves, discounting curves, volatility cubes, inflation curve and spread curves. For derivatives for which the Company has no strong credit support annex in place, a Credit Valuation Adjustment (CVA) is estimated in the calculation of the fair value.

Given the complexity in certain valuation models and inputs, the size and diversity of the portfolio, and the impact that the portfolio has on the results, this area is subject to higher risk of material misstatement due to error. Therefore, we consider

Our audit work and observations

Testing observable inputs: For both level 2 and level 3 financial instruments we compared the observable inputs such as forward curves, discounting curves and volatility cubes to independent sources and external market available data and we assessed whether these inputs are in line with market and industry practise. For the own funding curve used to determine the own credit adjustment for financial liabilities measured at fair value we evaluated the reasonableness of the curve construction by comparing the input to market information available over the full term of the curve. Our procedures demonstrated that management's inputs fall within our range of reasonable outcomes.

Challenging unobservable inputs: For level 3 instruments, we challenged management on assumptions and methodology applied and validated the internal process performed to determine these inputs. As part of this, we also evaluated to what extent we identified any indicators of possible management bias in estimating fair value. For the financial assets classified as level 3 we challenged how the unobservable inputs (such as monoline guarantees, and credit and liquidity spreads) were estimated and were determined based upon the internal policies. Based upon our procedures we consider the unobservable inputs and judgements made in determining the fair value of level 3 instruments to be reasonable and in-line with market practices.

Independent revaluation: For level 2 instruments, we performed an independent valuation of a sample of positions, taking into consideration different categories of financial instruments divided in, amongst others, maturity, currency classes, curves and various valuation models applied. We performed these procedures to determine if management's valuation outcomes fell within a reasonable range of possible

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Key audit matter

the fair value measurement of level 2 financial instruments a key audit matter.

Level 3 financial instruments: For level 3 financial instruments, management needs to estimate unobservable inputs that are significant to the measurement in the valuation models to determine fair value. The main unobservable inputs relate to recovery rates and correlation factors for bonds with a monoline guarantee and credit and liquidity spreads. Given the level of management estimation involved in determining these unobservable inputs, the long duration of some of those instruments and therefore the impact that these assumptions have on result, this area is subject to higher risk of material misstatement due to error. Therefore, we consider this a key audit matter.

Our audit work and observations

outcomes and to validate the design and operating effectiveness of the evaluated models and curves.

Report on the other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- selected financial data;
- foreword;
- profile;
- our contribution in 2019 and outlook;
- governance and internal business operations;
- report of the supervisory board;
- supplementary information; and
- the other information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

Based on the procedures performed as set out below, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements;
- contains the information that is required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained in our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing our procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of such procedures was substantially less than the scope of those performed in our audit of the financial statements.

The executive board is responsible for the preparation of the other information, including the directors' report and the other information in accordance with Part 9 of Book 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements

Our appointment

We were appointed on 23 April 2015 as auditor of BNG Bank N.V. by the general meeting following a recommendation by the supervisory board on 28 November 2014.

Our appointment has been renewed annually by shareholders representing a total period of uninterrupted engagement appointment of 4 years.

No prohibited non-audit services

To the best of our knowledge and belief, we have not provided prohibited non-audit services as referred to in Article 5(1) of the European Regulation on specific requirements regarding statutory audit of public-interest entities.

Services rendered

The services, in addition to the audit, that we have provided to the Company and its controlled entities, for the period to which our statutory audit relates, are disclosed in note 32 to the company financial statements.

Responsibilities for the financial statements and the audit

Responsibilities of the executive board and the supervisory board for the financial statements

The executive board is responsible for:

- the preparation and fair presentation of the financial statements in accordance with EU-IFRS and with Part 9 of Book 2 of the Dutch Civil Code; and for
- such internal control as the executive board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, the executive board is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the executive board should prepare the financial statements using the going-concern basis of accounting unless the executive board either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. The executive board should disclose events and circumstances that may cast significant doubt on the Company's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the Company's financial reporting process.

Our responsibilities for the audit of the financial statements

Our responsibility is to plan and perform an audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence to provide a basis for our opinion. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error and to issue an

auditor's report that includes our opinion. Reasonable assurance is a high but not absolute level of assurance, which makes it possible that we may not detect all material misstatements. Misstatements may arise due to fraud or error. They are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A more detailed description of our responsibilities is set out in the appendix to our report.

Amsterdam, 13 March 2020

PricewaterhouseCoopers Accountants N.V.

Original has been signed by

J.M. de Jonge RA

Appendix to our auditor's report on the financial statements 2019 of BNG Bank N.V.

In addition to what is included in our auditor's report, we have further set out in this appendix our responsibilities for the audit of the financial statements and explained what an audit involves.

The auditor's responsibilities for the audit of the financial statements

We have exercised professional judgement and have maintained professional scepticism throughout the audit in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit consisted, among other things of the following:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. 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 intentional override of internal control.
- Obtaining an understanding of internal control relevant to the audit 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 the Company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the executive board.
- Concluding on the appropriateness of the executive board's use of the going-concern basis of accounting, and based on the audit evidence obtained, concluding whether a material uncertainty exists related to events and/or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report and are made in the context of our opinion on the financial statements as a whole. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures, and evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Considering our ultimate responsibility for the opinion on the consolidated financial statements, we are responsible for the direction, supervision and performance of the group audit. In this context, we have determined the nature and extent of the audit procedures for components of the Group to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole. Determining factors are the geographic structure of the Group, the significance and/or risk profile of group entities or activities, the accounting processes and controls, and the industry in which the Group operates. On this basis, we selected group entities for which an audit or review of financial information or specific balances was considered necessary.

We communicate with the supervisory board 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. In this respect, we also issue an additional report to the audit committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the supervisory board, we determine those matters that were of most significance in the audit of the 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 or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Assurance report of the independent auditor

To: the general meeting and supervisory board of BNG Bank N.V.

Assurance report on the sustainability information 2019

Our opinion

In our opinion the sustainability information in the accompanying annual report 2019 of BNG Bank N.V. presents, in all material respects, a reliable and adequate view of:

- the policy and business operations with regard to corporate social responsibility; and
- the thereto related events and achievements for the year ended 31 December 2019 in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) - comprehensive option and the internally applied reporting criteria.

What we have audited

We have audited the sustainability information included in the annual report for the year ended 31 December 2019, as included in the following sections in the annual report ('the sustainability information'):

- Selected financial data - social and environmental data
- Paragraph 1.1 up to and including 1.5
- Paragraph 2.2 up to and including 2.9
- 3.3 Employees
- 3.7 Sustainable operations
- 5.1 Connectivity information
- 5.2 'Reporting principles'

The sustainability information comprises a representation of the policy and business operations of BNG Bank N.V., Den Haag (hereafter: 'BNG Bank') with regard to corporate social responsibility and the thereto related business operations, events and achievements for the year ended 31 December 2019.

The basis for our opinion

We have performed our audit in accordance with Dutch law, which includes the Dutch Standard 3810N 'Assuranceopdrachten inzake maatschappelijke verslagen' ('Assurance engagements on corporate social responsibility reports'). Our responsibilities under this standard are further described in the section 'Our responsibilities for the audit of the sustainability information' of this assurance report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence and quality control

We are independent of BNG Bank in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assuranceopdrachten' (ViO - Code of Ethics for Professional Accountants, a regulation with respect to independence) and other for the engagement relevant independence requirements in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA - Dutch Code of Ethics).

We apply the 'Nadere voorschriften kwaliteitssystemen' (NVKS - 'Regulations for quality systems') and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other applicable legal and regulatory requirements.

Reporting criteria

The sustainability information needs to be read and understood in conjunction with the reporting criteria. The executive board of BNG Bank is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The reporting criteria used for the preparation of the sustainability information are the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) and the internally applied reporting criteria, as disclosed in chapter 5.2 'Reporting principles' of the annual report. The absence of a significant body of established practice on which to draw, to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

Limitations to the scope of our audit

The sustainability information includes prospective information such as expectations on ambitions, strategy, plans and estimates. Inherently, the actual results are likely to differ from these expectations. These differences may be material. We do not provide any assurance on the assumptions and the achievability of prospective information in the sustainability information.

The links to external sources or websites in the sustainability information are not part of the sustainability information audited by us. We do not provide assurance over information outside of this the annual report.

Responsibilities for the sustainability information and the audit

Responsibilities of the executive board and the supervisory board

The executive board of BNG Bank N.V. is responsible for the preparation of reliable and adequate sustainability information in accordance with the reporting criteria as included in section 'reporting criteria', including the identification of stakeholders and the definition of material matters. The choices made by the executive board regarding the scope of the

sustainability information and the reporting policy are summarized in chapter 5.2 'Reporting principles' of the annual report.

The executive board is also responsible for such internal control as the executive board determines is necessary to enable the preparation of the sustainability information that is free from material misstatement, whether due to fraud or errors.

The supervisory board is responsible for overseeing the company's reporting process on the sustainability information.

Our responsibilities for the audit of the sustainability information

Our responsibility is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit information to provide a basis for our opinion.

Our opinion aims to provide reasonable assurance that the sustainability information contains no material misstatements. Reasonable assurance is a high, but not absolute level of assurance, which makes it possible that we may not detect all misstatements.

Procedures performed

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our procedures included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant social themes and issues, and the characteristics of the company.
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the sustainability information. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the executive board.
- Obtaining an understanding of the systems and processes for collecting, reporting, and consolidating the sustainability information, including obtaining an understanding of internal control relevant to our audit, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Identifying and assessing the risks if the sustainability information is misleading or unbalanced, or contains material misstatement, whether due to fraud or errors. Designing and performing further audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk that the sustainability information is misleading or unbalanced or the risk of not detecting a material misstatement, resulting from fraud is higher than for one resulting from errors. Fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. These further procedures consisted amongst others of:
 - Interviewing management (and/or relevant staff) at corporate level responsible for the sustainability strategy, policy and results;

- Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the sustainability information.
- Obtaining audit evidence that the sustainability information reconciles with underlying records of the company;
- Evaluating relevant internal and external documentation, on a sample basis, to determine the reliability of the information in the sustainability information;
- Reconciling the relevant financial information with the financial statements;
- With regard to the impact measurement of the loan portfolio based on the PCAF methodology we have performed audit procedures on the application of the methodology, not on the actual emissions itself. Audit procedures performed include:
 - Assessed the reasonableness of the scope of the measurement and the suitability of the methodology chosen;
 - Interviewed the management expert of BGN Bank N.V. for a key understanding of the impact measurement;
 - Reviewed the final report of the measurement containing a description of the calculation models, assumptions used and the outcome(s) of the impact measurement;
 - Obtaining a key understanding of the calculation model;
 - Tested the relevant assumptions on suitability, reasonableness, completeness and relevance;
 - Reconciling the loan portfolio balance per 31-12-2018 to the underlying financial administration;
 - Performed recalculation and reperformance of the calculations made and inspected underlying documents; obtaining underlying support for most significant assumptions/estimates.
- Evaluating the consistency of the sustainability information with the information in the annual report, which is not included in the scope of our audit.
- Evaluating the presentation, structure and content of the sustainability information;
- To consider whether the sustainability information as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the audit and significant findings, including any significant findings in internal control that we identify during our audit.

Amsterdam, 13 March 2020

PricewaterhouseCoopers Accountants N.V.

Original has been signed by

J.M. de Jonge RA

Stipulations of the articles of association concerning profit appropriation

Article 20

- 20.1 Profits shall be distributed after adoption by the general meeting of shareholders of the annual accounts showing that this is permissible.
- 20.2 The company may make payments to the shareholders from the profits available for distribution only in so far as its equity capital exceeds the amounts of the paid-up part of the capital plus the reserves which have to be kept by law.
- 20.3 First of all, if possible, the profits available for distribution shall be used to add an amount of ten per cent (10%) of the profit of the financial year as evidenced by the annual accounts to the general reserve; out of any surplus remaining thereafter, the shareholders shall, if possible, be paid five per cent (5%) of the nominal amount of their shareholding.
- 20.4 The remainder shall be paid to the shareholders in proportion to the nominal amount of their shareholdings, in so far as the general meeting of shareholders does not allocate this to reserves.
- 20.5 The company shall be empowered to make interim distributions, subject to the provisions of Article 105, paragraph 4, of Book 2 of the Civil Code, in the following manner:
 - a.the general meeting of shareholders requests the Executive Board in writing to submit a proposal for an interim distribution;
 - bif the Executive Board has not, within six months after receipt of such a request, submitted a proposal approved by the Supervisory Board to the general meeting of shareholders, the general meeting of shareholders shall be free to resolve to make an interim distribution;
 - c.if the general meeting of shareholders has rejected the proposal of the Executive Board approved by the Supervisory Board, the general meeting of shareholders shall again request the Executive Board in writing to submit a proposal within eight weeks after receipt of such a request. This proposal by the Executive Board again requires the approval of the Supervisory Board;
 - dif the general meeting of shareholders again rejects the proposal as referred to at c of this article 20 paragraph 5, the general meeting of shareholders shall be free to resolve to make an interim distribution.

Objectives as defined in the Articles of Association

Object

Article 2

- 2.1 The object of the company shall be to conduct the business of banker on behalf of public authorities.
- 2.2 In the context of its object as referred to in paragraph 1 the company shall engage, inter alia, in taking in and lending moneys, granting credits in other ways, providing guarantees, arranging the flow of payments, conducting foreign exchange transactions, acting as adviser and broker in the issue of and trade in securities, and keeping, managing and administering securities and other assets for third parties, as well as to incorporate and to participate in other enterprises and/or legal persons, whose object is connected with or conducive to any of the foregoing. The company shall be empowered to perform all acts which may be directly or indirectly conducive to its object.
- 2.3 The term public authorities as referred to in paragraph 1 means:
 - a.municipalities and other legal persons in the Netherlands under public law as referred to in Article 1, paragraphs 1 and 2, of Book 2 of the Civil Code;
 - bthe European Communities and other bodies possessing legal personality to which part of the function of the European Communities has been entrusted pursuant to the treaties establishing the European Communities;
 - c.Member States of the European Communities and other bodies possessing legal personality to which part of the administrative function of such a Member State has been entrusted pursuant to the law of that Member State;
 - dlegal persons under private law;
 - half or more of whose managing directors are appointed directly or indirectly by one or more of the bodies referred to in a, b and c of this paragraph; and/or
 - half or more of whose share capital is provided directly or indirectly by one or more of the bodies referred to in a, b and c; and/or
 - half or more of the income side of whose operating budget is provided or secured directly or indirectly by one or more of the bodies referred to in a, b and c on the basis of a scheme, bye-law or law adopted by one or more of such bodies; and/or
 - whose operating budget is adopted or approved directly or indirectly by one or more of the bodies referred to in a, b and c on the basis of a scheme, bye-law or law adopted by one or more of such bodies; and/or
 - whose obligations towards the company are guaranteed directly or indirectly by one or more of the bodies referred to in a, b and c or will be guaranteed pursuant

to a scheme, bye-law or law adopted by one or more of such bodies, for which purpose obligations include non-guaranteed obligations resulting from prefinancing or other financing which, after novation, will create obligations that will be guaranteed by one or more of such bodies pursuant to a scheme, bye-law or law adopted by one or more of such bodies; and/or

- who execute a part of the governmental function pursuant to a scheme, bye-law or law adapted by one or more of the bodies referred to in a, b and c.

Colophon

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For more information on the subject of sustainability, please contact Jan Klaassens:
jan.klaassens@bngbank.nl

BNG Bank
Koninginnegracht 2
P.O. Box 30305
2500 GH The Hague
The Netherlands
Telephone +31 70 3750 750
mc@bngbank.nl
bngbank.com

