BNG Bank N.V. (Group)

Creditreform ⊆ Rating

Long-Term Issuer Rating: AAA Outlook: stable

Short-Term Rating: L1

Preferred Sen. Unsec. Debt: AAA Non-Preferred Sen. Unsec. Debt: -Tier 2 Capital: -AT1 Capital: - **15 December 2022**

Rating Action:

Creditreform Rating affirms the Long-Term Issuer Rating of BNG Bank N.V. at 'AAA' (Outlook: stable)

Creditreform Rating (CRA) has affirmed the Long-Term Issuer Rating of BNG Bank N.V. at 'AAA' and the Short-Term Rating at 'L1'. The rating outlook is stable.

At the same time, CRA also affirms the ratings of 'Preferred Senior Unsecured' debt at 'AAA'.

Please find a complete list of rating actions regarding the bank at the end of this rating update.

Key Rating Driver

CRA has affirmed the rating of BNG Bank N.V. and its bank capital and debt instruments as a result of its periodic monitoring process for the following reasons:

- High probability of support in case of need by the highly rated Dutch government
- Superb asset quality and regulatory capital figures by industry standards
- Cost efficient operations but relatively weak profitability explained by clear policy mandate
- Elevated credit concentration mitigated by government guarantees covering a substantial part of the loan book
- Strong reliance on market funding but diverse investor base and a well staggered maturity profile

Company Overview

BNG Bank N.V. (referred to as BNG) is the fourth largest bank in the Netherlands in terms of total assets. The headquarters of BNG are located in The Hague and the bank operates without any branches. BNG's origin goes back to the year 1914, as of 2021 the number of employees stood at 362 (2020: 333). The bank's shareholders are exclusively public authorities of the Netherlands, whereby 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. Furthermore, BNG's articles of association allow only public shareholders.

BNG operates in the Netherlands as a national promotional Bank. Its objective is to support government policies by providing financing/loans to public sector institutions and local authorities in the Netherlands in order to minimize financing costs. The bank acts primarily in the area of housing, healthcare, education, energy and infrastructure. Moreover, BNG participates to a small extent in public-private partnerships in the Netherlands. The bank provides principally customized financial services ranging from loans, advances and funds transfers to consultancy, as well as electronic banking and investments.

BNG has two subsidiaries, both fully owned by BNG. BNG Gebiedsontwikkeling BV provides capital to public authorities and participates directly or indirectly in projects, either with or on behalf of public authorities or institutions affiliated with public authorities. However, this subsidiary does not initiate new projects since 2018. By contrast, the objective of Hypotheekfonds voor

Analysts

Johannes Kuehner j.kuehner@creditreform-rating.de Lead-Analyst

Philipp J. Beckmann p.beckmann@creditreform-rating.de Senior Analyst

Christian Konieczny c.konieczny@creditreform-rating.de Person Approving Credit Ratings

Neuss, Germany

BNG Bank N.V. (Group)

Creditreform C Rating

Overheidspersoneel BV (HVO) is the financing of mortgage loans taken out by civil servants employed by an affiliated public or semi-public institution with which a cooperation agreement is in place. However, HVO stopped issuing new mortgages after 2013.

As a result of the aforementioned facts, we classify BNG as a government-related bank under our rating criteria and take that into account of our analysis.

Rating Considerations and Rationale

BNG's credit rating affirmation is primarily driven by its close links with and the high probability of support by the government of the Netherlands (CRA Rating: AAA/stable as of 17.06.2022) and its public authorities in the event of financial distress. On a stand-alone basis, BNG Bank N.V. continues to exhibit extraordinarily strong asset quality metrics, as well as and strong regulatory capital figures, further underpinning the lenders ratings.

Profitability

Having declined for two consecutive years, BNG's operating income turned the corner in 2021, growing by by 8.2%. Last years recovery in operating income was entirely driven by net trading and securities income, which improved from € -17mn to €100mn in 2021, mainly on the back of a stronger hedge accounting result (€56mn in 2021; €-10mn in 2020). Moreover, favourable fair value changes contributed to the improvement. Realized gains resulting from sales of BNG's liquidity portfolio amounted to €59mn in 2021 (€39mn in 2020). At the same time, the unrealized result (€41mn 2021; €-56mn 2020) benefitted from an increase in long-term interest rates and lower spreads for credit and liquidity risks of interest-bearing securities and loans as market volatility subsided.

Net interest income, the bank's main profit driver (76.9% of operating income), slipped from €477mn to €407mn. While the low interest rate environment particularly squeezed net interest income from invested equity, most of the decline (€57mn) can be attributed to a procedural error. As BNG failed to comply with a reporting requirement on time, it did not qualify for the 0.5% conditional bonus rate for the first period (24 June 2020 to 23 June 2021) of the Targeted Longer-Term Refinancing Operation (TLTRO).

Turning to operating expenses, 2021 saw another significant increase over the previous year. Personnel expense was up 16% y-o-y to €57mn, following the banks hiring of temporary external staff in order to improve lending processes and IT-infrastructure. Also, other expenses came in higher than in 2020, due to higher bank levy payments on the back of the 2020 balance sheet expansion. As a result, total bank levy contributions went up from €34mn to €53mn. Other administrative expenses, which had been driven up by Covid-19 induced extra-spending in 2020, stabilized at €47mn.

Credit risk provisions amounted to €18mn, marginally above 2020 levels (€17mn). While the improved economic outlook allowed some provision releases for Stage 2 exposures, BNG booked higher provisions for Stage 3 exposures resulting from individual assessments. According to bank disclosures, Stage 3 provisions were lifted from €17mn (2020) to €49mn in 2021. That being said, the bank did not suffer any actual write-offs in its loan book.

Taking all aforementioned developments into account, BNG's net profit rose by 6.8% in 2021.

BNG Bank N.V. (Group)

Creditreform C Rating

Six months into 2022, BNG reported a net profit of €206mn, improving from €187mn in H1-21. The bank had to deal with a slightly lower interest result, payroll pressures and a significantly higher resolution levy (+€18mn). This however was more than offset by favourable developments of other items on the income statement. As compared to the previous year, the banks net profit was boosted by a higher result on financial transactions (€+29mn) and net impairment releases, which amounted to €14mn (H1-21: €7mn). In addition, net income benefitted from the sale of an equity stake in Data B. Mailservice B.V. (+€6mn), a governmental service provider.

With regard to the whole year 2022, BNG presents no guidance on net income, as unrealised market value changes can not be forecasted reliably and the impact of the war in Ukraine on customers is yet unknown.

Despite a gradual deterioration of the banks cost income ratio (CIR) in recent years, the overall level of cost-efficiency (CIR: 30.4%) still remains superb. Notwithstanding somewhat higher net profits in 2021, BNG's profitability remains modest by common industry standards. As of 2021, the banks net financial margin and its RoE posted at 0.34% and 6.9%, respectively. However, these numbers have to be seen against the backdrop of BNG's policy mandate that requires the bank to leverage its favourable refinancing terms in order to offer low cost funding to its public customer base.

In general, the bank displays a relatively wide gap between core (RoE; RoA) and risk weighted profit metrics, such as RoRWA. Risk weighted profitability metrics benefit from the banks low RWA-density inherent in its business model as a public sector lender. Dutch municipalities, housing associations and healthcare entities carry a risk weight of 0%, thereby supporting the institutions risk-weighted returns.

Asset Situation and Asset Quality

BNG's balance sheet is mainly characterized by lending operations, with net loans to customers representing 61% of the total asset base. The majority of loans are long-term loans, which are splitted across four main customer groups. In general, the bank displays a fairly concentrated borrower base. Dutch Housing associations account for almost half of the long-term loan portfolio, followed by municipalities (35.7%). The remaining portion is attributable to healthcare institutions (7.8%) and other borrowers (6.6%), including among others the education sector and public utilities. In light of government backstopped guarantees, that cover BNG's housing (Waarborgfonds Sociale Woningbouw) and healthcare (Waarborgfonds voor de Zorgsector) related loan exposures, we generally consider BNG's lending activities to be of low risk.

Despite the fact that net loans remained broadly stable, BNG's total assets markedly contracted in 2021. Last years increase in long-term interest rates triggered a sharp value adjustment of loans in portfolio hedge accounting from €20.8bn to €13.5bn, which explains the steep decline in derivative assets. Other financial assets including the banks cash collateral posted with third parties under netting agreements, also dropped precipitously.

Given the fact that over 90% of BNG's loans are issued to or guaranteed by the Dutch public authorities, credit risk is generally very low, resulting in impressive asset quality ratios. Despite a slight yoy-increase of the NPL-ratio, the overall level of non-performing loans remains very low, both compared to the banks total exposure, but also to other banks. The same holds true for the share of potential problem loans (Stage 2) within BNGs loan portfolio, which fell from a paltry 1.81% to 0.46% in 2021. Setting BNG apart from most other banks, the Covid-19 pandemic did not led to an uptick in risk charges. Thanks to the the resilience of its loan portfolio, cost of risk as measured by net loans, averaged at only 2bp per year over 2020/21.

BNG Bank N.V. (Group)

Creditreform C Rating

Refinancing, Capital Quality and Liquidity

BNG heavily relies on wholesale markets to fund its operations. Most of the banks outstanding debt securities (about 90%) are bond loans, with the remainder being made-up of commercial papers and privately placed debt securities.

Since 2019, however, we have observed a gradual shift in BNG's refinancing mix, namely replacing capital market debt with bank deposits. The main driver behind the tenfold increase in bank deposits over last two years was BNG's extensive participation in the ECBs TLTRO III program. In 2021 BNG continued to ramp up its use of cheap TLTRO III funding, drawing another €7.5bn under the program (Total TLTRO III liabilities: €18.5bn). Simultaneously, the outstanding amount of debt securities dropped by the same amount. Derivative liabilities and funds entrusted (other liabilities) were also down for the year.

In view of CRA, risks associated with BNG's reliance on wholesale funding are mitigated by its strong links with the Dutch government (AAA). Given its strategic importance as a promotional bank and largely government backed business activities, BNG enjoys a very good capital market access. Favourable investor sentiment towards the bank is among others reflected by a well-diversified investor base, its staggered maturity profile and its proven ability to issue foreign currency denominated debt (USD, GBP, AUD, CAD, NOK, SEK) on a regular base. Against this backdrop, we believe that refinancing risks are negligible as long as the Dutch state maintains its creditworthiness.

CRA considers solvency to be a key rating strength of BNG. In terms of the banks capital resources, 2021 witnessed slightly lower CET-1 and Tier1 ratios. Due to the implementation of the new CRR, BNG had to assign higher capital weightings for its derivative book. Nevertheless, BNG's continues to exhibit excellent solvency ratios (CET1: 32%; Total Capital: 38%), which remain far higher than seen with most European banks. Also in light of upcoming regulatory changes, we expect BNG to retain sizeable capital buffers above its regulatory requirements. As BNG uses the standardized approach to calculate its Pillar 1 capital, the implementation of an output floor under Basel III is not expected have any material impact on the banks capital metrics.

BNG's leverage ratio, which had hovered around 3.5% in recent years, improved significantly in 2021. Up from 3.6% in 2020, the leverage ratio skyrocketed to 10.6% last year. Most importantly, BNG profited from both permanent and temporary regulatory relief. Firstly, the updated Capital Requirements Directive allowed the bank to exclude its large portfolio of promotional loans from its leverage exposure. In addition, the bank has the option to temporarily deduct its ECB balances until the end of March 2022, further lowering the denominator of the leverage ratio.

BNG also posted stronger liquidity metrics in 2021. The LCR improved from 133 to 174%, owing to the build-up of its liquidity portfolio that mainly comprises highly rated government debt securities. Generally, we believe, that the LCR understates BNG's ability to access additional liquidity in case of need. In particular, BNG could use its large, solvency free promotional loan book as collateral to gather additional central bank liquidity.

BNG Bank N.V. (Group)

Creditreform ⊆ Rating

Environmental, Social and Governance (ESG) Score Card

Creditreform Bank Rating Environmental, Social and Governance (ESG) Bank Score

BNG Bank N V (Koninginnegracht 2, 2500 The Hague)

Creditreform ⊆ Rating

BNG Bank has one significant and two moderate ESG rating drivers

• Corporate Governance is identified as a highly significant rating driver. The relevance for the credit rating results from the impact of the Corporate Governance factor on all other ESG factors and the overall well-being of the bank. This sub-factor is rated positive due to the bank's sound track record, its numerous ESG related policies and its role as a promoting bank, forstering the sustainable development in the Netherlands.

3,8 / 5

ESG Bank Score

• Corporate Behaviour and Green Financing / Promoting are identified as moderate rating driver. While Green Financing / Promoting is rated positive due to a significant amount of social and green financing activities, Corporate Behaviour is rated positive due to the bank's business activities in accordance with the ideas and beliefs of the society.

Score Guidance							
> 4,25	Outstanding						
>3,5 - 4,25	Above-average						
>2,5 - 3,5	Average						
>1,75 - 2,5	Substandard						
<= 1,75	Poor						

Factor	Sub-Factor	Compidents	Scale 2022	Eval.		
ntal	1.1 Green Financing / Promoting	The sub-factor "Green Financing/Promoting" has a moderate relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	3	(+)		
ronme	1.2 Exposure to Environ- mental Factors	, , , , , , , , , , , , , , , , , , , ,				
Envi	1.3 Resource Efficiency The sub-factor "Resource Efficiency" has no significant relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.					

cial	I / T Human (anifal	The sub-factor "Human Capital" has low relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	2	(+)	
ŏ	I / / Social Responsibility	The sub-factor "Social Responsibility" has no significant relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	1	(+)	

Ge	13 1 (Ornorato (Overnance	The sub-factor "Corporate Governance" is highly relevant for the credit rating, and is rated positive in terms of the CRA ESG criteria.	4	(+)
vernan	I 3 7 Corporate Repayiour	The sub-factor "Corporate Behaviour" has a moderate relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	3	(+)
) 	3.3 Corporate Transparency The sub-factor "Corporate Transparency" has no significant relevance for the and is rated positive in terms of the CRA ESG criteria.		1	(+)

	ESG Relevance Scale					
5	Highest Relevance					
4	High Relevance					
3	Moderate Relevance					
2	Low Relevance					
1	No significant Relevance					

ESG Evaluation Guidance				
(+ +) Strong positive				
(+)	Positive			
()	Neutral			
(-)	Negative			
()	Strong negativ			

The ESG Score is based on the Methodology "Environmental, Social and Governance Score of Banken (Version 1.0)" of Creditreform Rating AG, which is available on our homepage https://creditreform-rating.de/en/about-us/regulatory-requirements.html. In addition, we refer to CRA's position paper "Consodering the Impact of ESG Factors".

BNG Bank N.V. (Group)

Creditreform ⊆ Rating

Outlook

The outlook for BNG's Long-Term Issuer Rating of BNG Bank N.V., as well as for its bank capital and debt instrument ratings is 'stable'. In the medium term, CRA expects higher interest rates to provide a tailwind to BNG's profitability. To be sure, there remain some short-term uncertainties surrounding the banks' 2022 earnings, namely the impact of the Russian-Ukrainian war on customers and future market value movements. Notwithstanding these uncertainties, BNG's outperformance in terms of asset quality as well as excellent capitalization support the abovementioned outlook. We also expect a stable political and economic environment in BNG's markets of operations.

Scenario Analysis

In a scenario analysis, the banks rating did not change in the "best case" scenario (as BNG already achieves the best possible rating). In the "worst case" scenario, the rating reaches an "AA" rating. The ratings of bank capital and preferred senior unsecured debt would behave similarly based on our rating mechanism. These ratings are especially sensitive to changes in total equity and to the bank capital and debt structure in general.

An upgrade of BNG's long-term issuer credit rating and its bank capital and debt instruments is not possible, as BNG already achieves the highest possible credit rating.

By contrast, a downgrade of BNG's long-term issuer credit rating and its bank capital and debt instruments is likely, if we see a detoriation of the Dutch sovereign rating and/or if our GRB assessment concludes, that a high support probability can no longer be assumed.

Best-case scenario: AAA

Worst-case scenario: AA

Please note:

The scenarios are based on information available at the time of the rating. Within the forecast horizon, circumstances may occur that could lead to a change of the rating out of the indicated range.

BNG Bank N.V. (Group)

Creditreform ⊆ Rating

CRA's rating actions at a glance

BNG Bank N.V.:

- Long-Term Issuer Rating affirmed at 'AAA', stable outlook
- Short-term rating affirmed at 'L1'
- Preferred senior unsecured debt affirmed at 'AAA'

BNG Bank N.V. (Group)

Creditreform C Rating

Ratings Detail

Bank ratings

The bank ratings are dependent on a host of quantitative and qualitative factors. An improvement in either sub-category may result in a higher rating score.

LT Issuer / Outlook / Short-Term AAA / stable / L1

Bank Capital and Debt Instruments Ratings

The ratings for bank capital and debt instruments are inter alia dependent on subordination and relative size of the instrument class, based on the long-term issuer rating of the bank.

Preferred senior unsecured debt (PSU):

AAA

Non-preferred senior unsecured debt (NPS):

-

Tier 2 (T2):

Additional Tier 1 (AT1):

Rating History

Please consult our website www.creditreform-rating.de for additional information regarding the dates of publication.

Figure 1: Rating History

Bank Issuer Rating	Rating Date	Result
Initialrating	06.04.2018	AAA / stable / L1
Monitoring	04.07.2018	AAA / stable / L1
Rating Update	17.09.2019	AAA / stable / L1
Monitoring	29.05.2020	AAA / watch unknown/ L1
Rating Update	06.11.2020	AAA / stable / L1
Rating Update	27.08.2021	AAA / stable / L1
Rating Update	15.12.2022	AAA / stable / L1
Bank Capital and Debt Instruments	Rating Date	Result
Bank Capital and Debt Instruments Senior Unsecured / T2 / AT1 (Initial)	Rating Date 06.04.2018	Result AAA / A+ / A
Senior Unsecured / T2 / AT1 (Initial)	06.04.2018	AAA / A+ / A
Senior Unsecured / T2 / AT1 (Initial) Senior Unsecured / T2 / AT1	06.04.2018 04.07.2018	AAA / A+ / A AAA / n.r. /n.r.
Senior Unsecured / T2 / AT1 (Initial) Senior Unsecured / T2 / AT1 PSU	06.04.2018 04.07.2018 17.09.2019	AAA / A+ / A AAA / n.r. /n.r. AAA
Senior Unsecured / T2 / AT1 (Initial) Senior Unsecured / T2 / AT1 PSU PSU	06.04.2018 04.07.2018 17.09.2019 29.05.2020	AAA / A+ / A AAA / n.r. /n.r. AAA AAA (watch unknown)

BNG Bank N.V. (Group)

Creditreform C Rating

Appendix

Figure 2: Group income statement¹ | Source: eValueRate / CRA

Income Statement (EUR m)		%		%	2019	%	
Income							
Net Interest Income	407	-14,7	477	+9,7	435	+0,2	434
Net Fee & Commission Income	17	-32,0	25	-16,7	30	+7,1	28
Net Insurance Income	-	-	-	-	-	-	-
Net Trading & Fair Value Income	100	< -100	-17	< -100	37	-66,7	111
Equity Accounted Results	4	+33,3	3	+0,0	3	-25,0	4
Dividends from Equity Instruments	-	-	-	-	-	-	-
Other Income	1	+0,0	1	+0,0	1	-66,7	3
Operating Income	529	+8,2	489	-3,4	506	-12,8	580
Expense							
Depreciation and Amortisation	3	+0,0	3	+0,0	3	+0,0	3
Personnel Expense	57	+16,3	49	+19,5	41	+2,5	40
Tech & Communications Expense	-	-	-	-	-	-	-
Marketing and Promotion Expense	-	-	-	-	-	-	-
Other Provisions	-	-	-	-	-	-	-
Other Expense	101	+14,8	88	+17,3	75	-1,3	76
Operating Expense	161	+15,0	140	+17,6	119	+0,0	119
Operating Profit & Impairment							
Operating Profit	368	+5,4	349	-9,8	387	-16,1	461
Cost of Risk / Impairment	18	+5,9	17	-89,4	160	>+100	2
Net Income							
Non-Recurring Income	-	-	-	-	-	-	-
Non-Recurring Expense	-	-	-	-	-	-	-
Pre-tax Profit	350	+5,4	332	+46,3	227	-50,5	459
Income Tax Expense	114	+2,7	111	+73,4	64	-47,5	122
Discontinued Operations	-	-	-	-	-	-	-
Net Profit	236	+6,8	221	+35,6	163	-51,6	337
Attributable to minority interest (non-controlling interest)	-	-	-	-	-	-	
Attributable to owners of the parent	211	+4,5	202	+42,3	142	-55,3	318

Figure 3: Group key earnings figures | Source: eValueRate / CRA

La casa a Davis a (A/)	2024	0/	2020	0/	2010	0/	2040
Income Ratios (%)	2021	%	2020	%	2019	%	2018
Cost Income Ratio (CIR)	30,43	+1,80	28,63	+5,11	23,52	+3,00	20,52
Cost Income Ratio ex. Trading (CIRex)	37,53	+9,86	27,67	+2,29	25,37	+0,00	25,37
Return on Assets (ROA)	0,16	+0,02	0,14	+0,03	0,11	-0,14	0,25
Return on Equity (ROE)	4,66	+0,33	4,34	+1,00	3,34	-3,42	6,75
Return on Assets before Taxes (ROAbT)	0,23	+0,03	0,21	+0,06	0,15	-0,18	0,33
Return on Equity before Taxes (ROEbT)	6,91	+0,40	6,51	+1,87	4,64	-4,55	9,20
Return on Risk-Weighted Assets (RORWA)	1,85	+0,03	1,82	+0,49	1,33	-1,46	2,79
Return on Risk-Weighted Assets before Taxes (RORWAbT)	2,74	+0,01	2,74	+0,89	1,85	-1,94	3,79
Net Financial Margin (NFM)	0,34	+0,05	0,29	-0,03	0,32	-0,08	0,40
Pre-Impairment Operating Profit / Assets	0,25	+0,03	0,22	-0,04	0,26	-0,08	0,34
Cost of Funds (COF)	2,79	-0,05	2,84	-0,68	3,52	-0,48	3,99
Customer Interest Spread (CIS)	-83,60	-10,48	-73,12	+11,93	-85,06	-	-
Basic EPS	3,79	+0,17	3,62	+1,07	2,55	-	-
Dividend Payout Ratio	60,00	+10,00	50,00	+0,00	50,00	+0,00	50,00
Dividends declared per ordinary Share	2,28	+0,47	1,81	+0,54	1,27	-1,58	2,85
Change in %-Points		•		•			

¹ Data by our data provider eValueRate, which is standardized for analytical reasons. Thus, the used data and the resulting figures do not have necessary to match the presentation of the bank, which refers to this and all subsequent tables and figures.

BNG Bank N.V. (Group)

Creditreform C Rating

Figure 4: Development of assets | Source: eValueRate / CRA

rigare 4. Development of assets Source, eva	identate / envi						
Assets (EUR m)	2021	%	2020	%	2019	%	2018
Cash and Balances with Central Banks	9.264	>+100	2.312	+81,8	1.272	-19,8	1.587
Net Loans to Banks	163	+35,8	120	+81,8	66	-19,5	82
Net Loans to Customers	90.271	+0,8	89.569	+0,7	88.970	+3,8	85.693
thereof: Gross Loans to Customers	-	-	-	-	-	-	
thereof: Reserve on Loans to Customers	-	-	-	-	-	-	-
Total Securities	17.054	-7,5	18.443	+2,1	18.059	+0,3	18.001
thereof: Total Debt Instruments	17.054	-7,5	18.443	+2,1	18.059	+0,3	18.001
thereof: Total Equity Instruments	-	-	-	-	-	-	-
Total Derivative Assets	19.240	-34,5	29.356	+10,9	26.466	+32,6	19.956
Other Financial Assets	12.993	-36,2	20.361	+39,0	14.643	+21,6	12.043
Financial Assets	148.985	-7,0	160.161	+7,1	149.476	+8,8	137.362
Equity Accounted Investments	28	-9,7	31	-11,4	35	-20,5	44
Other Investments	-	-	-	-	-	-	-
Insurance Assets	-	-	-	-	-	-	-
Non-current Assets & Discontinued Ops	8	-	-	-	-	-	-
Tangible and Intangible Assets	15	-11,8	17	-5,6	18	+5,9	17
Tax Assets	-	-	1	-96,7	30	> +100	7
Total Other Assets	21	-85,9	149	+14,6	130	+64,6	79
Total Assets	149.057	-7,0	160.359	+7,1	149.689	+8,9	137.509

Figure 5: Development of asset quality | Source: eValueRate / CRA

0		-					
Asset Ratios (%)	2021	%	2020	%	2019	%	2018
Net Loans/ Assets	60,56	+4,71	55,86	-3,58	59,44	-2,88	62,32
Risk-weighted Assets/ Assets	8,56	+1,00	7,56	-0,64	8,20	-0,60	8,80
NPLs*/ Net Loans to Customers	0,61	+0,17	0,44	+0,12	0,33	+0,26	0,07
NPLs*/ Risk-weighted Assets	4,30	+1,04	3,27	+0,90	2,36	+1,89	0,47
Potential Problem Loans**/ Net Loans to Customers	0,46	-1,35	1,81	+0,19	1,62	+0,03	1,59
Reserves/ NPLs*	43,17	-9,86	53,03	-13,52	66,55	-15,90	82,46
Reserves/ Net Loans	0,26	+0,03	0,23	+0,02	0,22	+0,16	0,05
Cost of Risk/ Net Loans	0,02	+0,00	0,02	-0,16	0,18	+0,18	0,00
Cost of Risk/ Risk-weighted Assets	0,14	+0,00	0,14	-1,16	1,30	+1,29	0,02
Cost of Risk/ Total Assets	0,01	+0,00	0,01		0,11		0,00
Change in %-Points							

NPLs are represented by Stage 3 Loans where available.
 Potential Problem Loans are Stage 2 Loans where available

Figure 6: Development of refinancing and capital adequacy| Source: eValueRate / CRA

Liabilities (EUR m)	2021	%	2020	%	2019	%	2018
Total Deposits from Banks	19.525	+59,8	12.220	> +100	1.933	-18,9	2.383
Total Deposits from Customers	4.525	-19,2	5.599	+0,4	5.575	-	0
Total Debt	101.701	-7,0	109.306	-3,6	113.368	+8,5	104.516
thereof: Senior Debt	-	-	-	-	-	-	-
thereof: Subordinated Debt	36	+2,9	35	+6,1	33	+3,1	32
Derivative Liabilities	16.935	-37,2	26.965	+19,0	22.651	+17,8	19.223
Securities Sold, not yet Purchased	-	-		-	-	-	-
Other Financial Liabilities	984	+14,7	858	-24,5	1.137	-81,7	6.219
Total Financial Liabilities	143.670	-7,3	154.948	+7,1	144.664	+9,3	132.341
Insurance Liabilities	-	-	-	-	-	-	-
Non-current Liabilities & Discontinued Ops	-	-	-	-	-	-	-
Tax Liabilities	109	+11,2	98	+25,6	78	-21,2	99
Provisions	2	+0,0	2	+0,0	2	+0,0	2
Total Other Liabilities	214	+0,0	214	> +100	58	-23,7	76
Total Liabilities	143.995	-7,3	155.262	+7,2	144.802	+9,3	132.518
Total Equity	5.062	-0,7	5.097	+4,3	4.887	-2,1	4.991
Total Liabilities and Equity	149.057	-7,0	160.359	+7,1	149.689	+8,9	137.509

BNG Bank N.V. (Group)

Creditreform ⊆ Rating

Figure 7: Development of capital ratios and liquidity | Source: eValueRate / CRA

Capital Ratios and Liquidity (%)	2021	%	2020	%	2019	%	2018
Total Equity/ Total Assets	3,40	+0,22	3,18	-0,09	3,26	-0,36	3,63
Leverage Ratio	10,60	+7,10	3,50	-0,10	3,60	-0,20	3,80
Common Equity Tier 1 Ratio (CET1)*	32,00	-1,40	33,40	+1,09	32,31	+0,21	32,10
Tier 1 Ratio (CET1 + AT1)*	38,00	-1,44	39,44	+1,24	38,20	+0,10	38,10
Total Capital Ratio (CET1 + AT1 + T2)*	38,00	-1,44	39,44	+1,24	38,20	+0,10	38,10
SREP/ CET1 Minimum Capital Requirements	10,00	-0,25	10,25	-0,08	10,33	+1,38	8,95
MREL / TLAC Ratio	-	-	-	-	•	-	-
Net Loans/ Deposits (LTD)	1994,94	+395,21	1599,73	+3,86	1595,87	-	-
Net Stable Funding Ratio (NSFR)	126,00	+4,00	122,00	-4,00	126,00	-7,00	133,00
Liquidity Coverage Ratio (LCR)	174,00	+41,00	133,00	-25,00	158,00	-17,00	175,00
Change in % Reintr							

^{*} Fully-loaded where available

BNG Bank N.V. (Group)

Creditreform C Rating

Regulatory

Creditreform Rating AG was neither commissioned by the rating object nor by any other third party for the rating. The analysis took place on a voluntary basis by Creditreform Rating AG and is to be described in the regulatory sense as an unsolicited rating. The following scheme clarifies the level of participation of the rated entity (rating object):

Unsolicited Credit Rating				
With Rated Entity or Related Third Party Participation	No			
With Access to Internal Documents	No			
With Access to Management	No			

The rating is based on publicly available information and internal evaluation methods for the rated bank. The quantitative analysis is based mainly on the latest annual accounts, interim reports, other investor relations information of the bank, and calculated key figures by eValueRate / CRA.

The information and documents processed met the requirements of the rating system of Creditreform Rating AG as published on the website www.creditreform-rating.de. The rating was carried out on the basis of the rating methodology for bank ratings (v3.1), the methodology for the rating of bank capital and unsecured debt instruments (v2.1), the methodology for the rating of Government-Related Banks (v2.0) as well as the rating methodology for Environmental, Social and Governance Score for Banks (v1.0) in conjunction with Creditreform's basic document Rating Criteria and Definitions (v1.3).

The complete presentation of the rating methodologies used by Creditreform Rating AG and the basic document Rating Criteria and Definitions (v1.3) are published on our homepage:

https://www.creditreform-rating.de/en/about-us/regulatory-requirements.html

On 15 December 2022, the rating was presented by the analysts to the rating committee and adopted in a resolution.

The rating result was communicated to BNG Bank N.V., and the preliminary rating report was made available to the bank. There was no change in the rating score.

The rating is valid until withdrawal and is subject to monitoring from the rating date (see cover page). The rating will be comprehensively reviewed at least once every year. Within this period, the rating can be updated.

In 2011 Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG (CRA) is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation. Rating Endorsement Status:

The rating of BNG Bank N.V. was not endorsed by Creditreform Rating AG from a third country as defined in Article 4 (3) of the CRA-Regulation.

Conflict of Interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks.

BNG Bank N.V. (Group)

Creditreform C Rating

In case of providing ancillary services to the rated entity, CRA will disclose all ancillary services in the credit rating report.

Rules on the Presentation of Credit Ratings and Rating Outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our policy "Rating Committee," all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, CRA has used following substantially material sources:

- 1. Aggregated data base by eValueRate
- 2. Annual Report and interim reports
- 3. Investors relations information and other publications
- 4. Website of the rated bank
- 5. Public and internal market analyses
- 6. Internet research

There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRA website. Furthermore CRA considers satisfactory the quality and extent of information available on the rated entity. In regard to the rated entity Creditreform Rating AG regarded available historical data as sufficient.

Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The "Basic data" information card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In case where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating and indicates how the different methodologies or these other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions, such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings as well as best-case scenario credit ratings are explained in mentioned methodologies and / or in the credit rating report.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the rating report or in the "Basic data" card as a "Rating action"; first release is indicated as "initial rating", other updates are indicated as an "update", "upgrade or downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available in the rating report or the "Basic data" information card.

BNG Bank N.V. (Group)

Creditreform C Rating

In accordance to Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website: https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml.

An explanatory statement of the meaning of Creditreform's default rates are available in the credit rating methodologies disclosed on the website.

Disclaimer

Any rating performed by Creditreform Rating AG is subject to the Creditreform Rating AG Code of Conduct which has been published on the web pages of Creditreform Rating AG. In this Code of Conduct, Creditreform Rating AG commits itself – systematically and with due diligence – to establish its independent and objective opinion as to the sustainability, risks and opportunities concerning the enterprise or the issue under review.

Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. This rating is therefore no statement of fact, but an opinion. For this reason, Creditreform Rating AG cannot be held liable for the consequences of decisions made on the basis of any of their ratings. Neither should these ratings be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers, investors etc.) as one factor among others when arriving at corporate or investment decisions. Ratings are not meant to be used as substitutes for one's own research, inquiries and assessments.

We have assumed that the documents and information made available to us by the client are complete and accurate and that the copies provided to us represent the full and unchanged contents of the original documents. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

This report is protected by copyright. Any commercial use is prohibited without prior written permission from Creditreform Rating AG. Only the full report may be published in order to prevent distortion of the report's overall assessment. Excerpts may only be used with the express consent of Creditreform Rating AG. Publication of the report without the consent of Creditreform Rating AG is prohibited. Only ratings published on the Creditreform Rating AG web pages remain valid.

Creditreform Rating AG

BNG Bank N.V. (Group)

Creditreform C Rating

Contact information

Creditreform Rating AG Europadamm 2-6 D-41460 Neuss

Phone +49 (0) 2131 / 109-626 Fax +49 (0) 2131 / 109-627

E-Mail info@creditreform-rating.de www.creditreform-rating.de

CEO: Dr. Michael Munsch

Chairman of the Board: Michael Bruns HR Neuss B 10522