Creditreform ⊆ Rating

Rating Object		Rating Information	
BNG Bank NV (Group)		Long Term Issuer Rating / Outlook:	Short Term:
		AAA / stable	L1
Creditreform ID:	46721 Gita Salden (CEO)	Type: Update / Unsolicited	
Rating Date: Monitoring until:	27 August 2021 withdrawal of the rating	Rating of Bank Capital and Unsecured Deb	ot Instruments:
Rating Methodology	r: CRA "Bank Ratings v.3.0" CRA "Rating of Bank Capital and Unsecured Debt Instruments v.2.0" CRA "Government-Related Banks v.2.0"	Preferred Senior Unsecured:	AAA
	CRA "Environmental, Social and Governance Score for Banks v.1.0" CRA "Rating Criteria and Definitions v.1.3"	Non-Preferred Senior Unsecured: Tier 2:	
Rating History:	www.creditreform-rating.de	Additional Tier 1:	-

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Key Rating Driver

- High probability of support by the government of the Netherlands
- Leading lender to the Dutch public sector
- Outstanding asset quality
- Very high regulatory capital ratios
- Stabilization and continuity through public shareholder
- Increasing need for financial funding on part of public authorities
- Stable performance despite the Corona pandemic effects
- Credit concentration risk and dependency due to the relationship to public authorities in the Netherlands
- Limited possibilities for diversification
- Regulatory requirements compromise the role of public authorities as guarantor
- Low-interest policy of the ECB puts pressure on profitability

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Executive Summary

Creditreform Rating affirms the long term issuer rating of BNG Bank NV at AAA/stable. Major key rating driver is the close relationship and the high probability of support by the government of the Netherlands (CRA Rating: AAA/stable as of 18.06.2021) and its public authorities in the event of financial distress. In addition, BNG Bank NV records an outstanding asset quality and strong regulatory capital figures.

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Company Overview

The 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 other branches. BNG's origin goes back to the year 1914. With 333 employees (2019: 314) at the end of 2020, BNG reached total assets of €160.4 billion. 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 in 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 Overheidspersoneel BV (HVO) is the financing of mortgage loans taken out by civil servants employed by an affiliated public or semipublic institution with which a cooperation agreement has been reached. However, HVO stopped issuing new mortgages after 2013.

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

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Business Development

Profitability

BNG records a further decline of its operating income and reached €489 million in 2020. The main driver of the decrease was BNG's net trading income, which lowered by €54 million YOY. The driver of this decrease is primarily according to the bank related to the Corona pandemic. Among other things, the pandemic resulted in adverse fair value changes and caused a decline of long-term interest rates and higher spreads for credit and liquidity risks of interest-bearing securities and loans (€-24mn in 2020; €29mn in 2019). In addition, the bank recorded a negative result on its hedge accounting (€-10mn in 2020; €8mn in 2019). However, these losses were partially counteracted by realized gains from the sale of interest-bearing securities from the bank's liquidity portfolio, which amounted to €39mn in 2020 (€21mn in 2019). By contrast, net interest income as the major contributor to operating income increased significantly due to the favorable terms and conditions set by the ECB for participation in the TLTRO III funding where BNG took about €11bn. In addition, the banks increased its amount of long-term loans granted.

Operating expenses amounted to €140 million in 2020, increasing significantly over the recent year. Personnel expense increased by €8 million YOY following the growth of BNG's workforce, the decision to fill a relatively large number of vacancies by temporarily hiring external staff, and the addition to the staff provision. Other expense consist primarily of a specific bank levy (€34mn), the contribution to the resolution fund (€8 million) and other administrative expenses (€46 million) which went up following addition investments due to the Corona pandemic (expenditure on facilitating home workspaces and investments in new IT systems).

Due to the deteriorated economic outlook following the Corona pandemic, BNG increased its credit risk provisions by about €16mn in 2020 to a total allowance for credit losses of about €220mn. However, the bank did not take any write-offs on its loans. In 2019, BNG recorded a large impairment (stage 3) of €148mn following the decreased credit worthiness of a significant obligator that provides services to municipalities. Because of the Dutch government guarantees the majority of the bank's exposures, we do not expect a significant worsening of the bank's intrinsic profitability. Thus, the Corona pandemic impact remains limited.

A detailed group income statement for the years of 2017 through 2020 can be found in Figure 1 below:

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Figure 1: Group income statement | Source: eValueRate / CRA

Income Statement (EUR m)	2020	%	2019	2018	2017
Income					
Net Interest Income	477.000	+9,7	435.000	434.000	435.000
Net Fee & Commission Income	25.000	-16,7	30.000	28.000	23.000
Net Insurance Income	-	-	-	-	-
Net Trading Income	-17.000	< -100	37.000	111.000	181.000
Equity Accounted Results	3.000	+0,0	3.000	4.000	2.000
Dividends from Equity Instruments	-	-	-	-	-
Other Income	1.000	+0,0	1.000	3.000	2.000
Operating Income	489.000	-3,4	506.000	580.000	643.000
Expense					
Depreciation and Amortisation	3.000	+0,0	3.000	3.000	2.000
Personnel Expense	49.000	+19,5	41.000	40.000	44.000
Tech & Communications Expense	-	-	-	-	-
Marketing and Promotion Expense	-	-	-	-	-
Other Provisions	-	-	-	-	-
Other Expense	88.000	+17,3	75.000	76.000	71.000
Operating Expense	140.000	+17,6	119.000	119.000	117.000
Operating Profit & Impairment					
Pre-impairment Operating Profit	349.000	-9,8	387.000	461.000	526.000
Asset Writedowns	17.000	-89,4	160.000	2.000	-10.000
Net Income					
Non-Recurring Income	-	-	-	-	-
Non-Recurring Expense	-	-	-	-	-
Pre-tax Profit	332.000	+46,3	227.000	459.000	536.000
Income Tax Expense	111.000	+73,4	64.000	122.000	143.000
Discontinued Operations	1	-	-	-	-
Net Profit	221.000	+35,6	163.000	337.000	393.000
Attributable to minority interest (non-controlling interest)	-	- 1	-	-	-
Attributable to owners of the parent	202.000	+42,3	142.000	318.000	375.000

BNG's cost to income ratios remain at an outstanding level despite the worsening over the recent years. Following the increased expenses on a very low level, we expect BNG to maintain its convincing Cost to income ratios. However, the significant reduction of the impairments YOY resulted in improved Group's ROE, ROA and RORWA ratios. While the banks return on risk weighted assets before and after taxes are favorable due to the low RWA volume, BNG's return on equity ratios below average despite the improvement YOY. In addition, as a result of the bank's business model, its return on assets ratios before and after taxes are relatively low. Moreover, BNG's net interest margin is unsatisfactory but are related to the banks business activities as well. Overall, BNG's reports moderate earnings figures, which is primarily a result of its business model as promoting bank for the Dutch public sector.

A detailed overview of the income ratios for the years of 2017 through 2020 can be found in Figure 2 below:

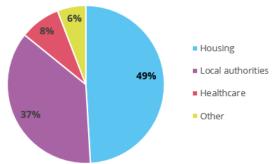
Figure 2: Group key earnings figures | Source: eValueRate / CRA

Income Ratios (%)	2020	%	2019	2018	2017
Cost Income Ratio (CIR)	28,63	+5,11	23,52	20,52	18,20
Cost Income Ratio ex. Trading (CIRex)	27,67	+2,29	25,37	25,37	25,32
Return on Assets (ROA)	0,14	+0,03	0,11	0,25	0,28
Return on Equity (ROE)	4,34	+1,00	3,34	6,75	7,93
Return on Assets before Taxes (ROAbT)	0,21	+0,06	0,15	0,33	0,38
Return on Equity before Taxes (ROEbT)	6,51	+1,87	4,64	9,20	10,82
Return on Risk-Weighted Assets (RORWA)	1,82	+0,49	1,33	2,79	3,38
Return on Risk-Weighted Assets before Taxes (RORWAbT)	2,74	+0,89	1,85	3,79	4,60
Net Interest Margin (NIM)	0,29	-0,03	0,32	0,40	0,44
Pre-Impairment Operating Profit / Assets	0,22	-0,04	0,26	0,34	0,38
Cost of Funds (COF)	2,84	-0,68	3,52	3,99	4,06
Change in %- Points					

Asset Situation and Asset Quality

BNG's asset side is marked by its loans to public customers. Net loans to customers represent the largest share of assets, accounting for almost 56% of total assets, remaining widely unchanged in a year-over-year comparison. The largest share of loans (96%) are long-term loans in the area of social housing, local authorities and healthcare. In addition, about 90% of BNG's loans are granted to or guaranteed by public authorities, which shows thereby the very close relationship to the Netherlands. The breakdown of loans by business areas of BNG as of 2020 are as follows:

Chart 1: Loan portfolio of BNG by business area \mid Source: Annual report of BNG 2020 / CRA



BNG's total securities item mainly comprises government debt securities. By contrast, BNG's increase in derivative assets is related to unrealized gains in the bank's portfolio hedge accounting item. Other financial assets comprises the banks cash collateral posted with third parties under netting agreements and as such is not freely available to BNG Bank. Overall, we expect an increase in the banks business activities as a result of greater financing needs in the public sector due to economic downturn following the Corona pandemic. As of now, BNG records increasing long-term financing needs on behalf of the local authorities

A detailed look at the development of the asset side of the balance sheet for the years of 2017 through 2020 can be taken in Figure 3 below:

Figure 3: Development of assets | Source: eValueRate / CRA

Assets (EUR m)	2020	%	2019	2018	2017
Cash and Balances with Central Banks	2.312.000	+81,8	1.272.000	1.587.000	2.996.000
Net Loans to Banks	120.000	+81,8	66.000	82.000	105.000
Net Loans to Customers	89.569.000	+0,7	88.970.000	85.693.000	86.850.000
Total Securities	18.082.000	+0,1	18.059.000	18.001.000	15.274.000
Total Derivative Assets	29.356.000	+10,9	26.466.000	19.956.000	8.982.000
Other Financial Assets	20.722.000	+41,5	14.643.000	12.043.000	25.705.000
Financial Assets	160.161.000	+7,1	149.476.000	137.362.000	139.912.000
Equity Accounted Investments	31.000	-11,4	35.000	44.000	47.000
Other Investments	-	-	-	-	-
Insurance Assets	-	-	-	-	-
Non-current Assets & Discontinued Ops	-	-	-	-	30.000
Tangible and Intangible Assets	17.000	-5,6	18.000	17.000	17.000
Tax Assets	1.000	-96,7	30.000	7.000	=
Total Other Assets	149.000	+14,6	130.000	79.000	19.000
Total Assets	160.359.000	+7,1	149.689.000	137.509.000	140.025.000

BNG maintains its outstanding assets quality. The NPL ratio of 0.44%, despite the increase, is at a very low level, outperforms many other banks and indicates its customer base. In addition, throughout its history BNG displays a very impressing asset quality. This fact is underpinned by the bank's very low stage 2 ratio. The ratio of net write-offs to total assets normalized (following the large impairment in 2019) to a sound level as well. In addition, as a result of BNG's business model and its lending to the public sector with its risk-weighting of 0%, the bank reports a very favorable RWA ratio of 7.5%. Overall, BNG's asset quality is at a very strong level in comparison to the most banks, which indicates the banks role of a public finance institute in an economical strong country.

The bank's asset quality figures are the best performers in any of the areas analyzed.

A detailed overview of the asset quality for the years of 2017 through 2020 can be found in Figure 4 below:

Figure 4: Development of asset quality | Source: eValueRate / CRA

Asset Ratios (%)	2020	%	2019	2018	2017
Net Loans/ Assets	55,86	-3,58	59,44	62,32	62,02
Risk-weighted Assets/ Assets	7,56	-0,64	8,20	8,80	8,31
NPLs*/ Net Loans to Customers	0,44	+0,12	0,33	0,07	0,06
NPLs*/ Risk-weighted Assets	3,27	+0,90	2,36	0,47	0,47
Potential Problem Loans**/ Net Loans to Customers	1,81	+0,19	1,62	1,59	0,00
Reserves/ NPLs*	53,03	-13,52	66,55	82,46	61,82
Reserves/ Net Loans	0,23	+0,02	0,22	0,05	0,04
Net Write-offs/ Net Loans	0,02	-0,16	0,18	0,00	-0,01
Net Write-offs/ Risk-weighted Assets	0,14	-1,16	1,30	0,02	-0,09
Net Write-offs/ Total Assets	0,01	-0,10	0,11	0,00	-0,01
Level 3 Assets/ Total Assets	0,42	-0,07	0,49	0,51	0,45
Change in %- Points					

Change in %- Points

* NPLs are represented from 2017 onwards by Stage 3 Loans.

** Potential Problem Loans are Stage 2 Loans where available.

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Refinancing, Capital Quality and Liquidity

Total debt represents BNG's major source of refinancing with about 70%, but decreasing in comparison to the previous year by about €4bn, following the bank's participation in the ECB's TLTRO III program. The debt position consists primarily of long-term bond loans (85%) and commercial paper (7%) in addition to private placements. The participation at the ECB's TLTRO III program with about €11bn at a negative interest rate increased the bank's deposits from banks position. Thus, the bank's interest income will strongly benefit from this program for three years. Derivate liabilities represent the second largest share of BNG's liabilities, and consists primarily of hedging derivatives. Other financial liabilities represents primarily the banks "funds entrusted". Overall, we do not perceive any refinancing risk at BNG due to its widely government-backed business activities and its specific role as a promoting bank for the Dutch public sector.

A detailed overview of the development of liabilities for the years of 2017 through 2020 can be found in Figure 5 below:

Figure 5: Development of refinancing and capital adequacy | Source: eValueRate / CRA

Liabilities (EUR m)	2020	%	2019	2018	2017
Total Deposits from Banks	12.221.000	>+100	1.933.000	2.383.000	2.079.000
Total Deposits from Customers	5.599.000	+0,4	5.575.000	0	-
Total Debt	109.306.000	-3,6	113.368.000	104.516.000	105.102.000
Derivative Liabilities	26.965.000	+19,0	22.651.000	19.223.000	21.870.000
Securities Sold, not yet Purchased	ı	-	1	1	-
Other Financial Liabilities	858.000	-24,5	1.137.000	6.219.000	5.786.000
Total Financial Liabilities	154.949.000	+7,1	144.664.000	132.341.000	134.837.000
Insurance Liabilities	-	-	-	-	•
Non-current Liabilities & Discontinued Ops	-	-	ı	ı	ı
Tax Liabilities	98.000	+25,6	78.000	99.000	190.000
Provisions	2.000	+0,0	2.000	2.000	2.000
Total Other Liabilities	213.000	>+100	58.000	76.000	43.000
Total Liabilities	155.262.000	+7,2	144.802.000	132.518.000	135.072.000
Total Equity	5.097.000	+4,3	4.887.000	4.991.000	4.953.000
Total Liabilities and Equity	160.359.000	+7,1	149.689.000	137.509.000	140.025.000

BNG's regulatory capital ratios (CET1, AT1 and Tier 2) remain at an outstanding level and are clearly more favorable than of most other European banks. BNG is able to reach this impressive level as the bank's assets are primarily related to public authorities with a risk weighting of 0%. As a result, BNG risk-weighted assets volume is on a very low level, which leads to the outstanding regulatory capital ratios. The few fluctuations in these ratios is related to the changes in the bank's risk-weighted assets. Moreover, BNG clearly exceeds the regulatory required CET1 ratio of 10.25%. By contrast, the bank's equity to total capital ratio is at very low level. This fact is due to the bank's business model as a public lender and the relatively low capital needs.

BNG's leverage ratio of 3.5% in 2020 is slightly above the regulatory required 3%. However, BNG will benefit from the upcoming change of the regulatory environment (with effect from June 2021), which will lead to a deductibility of promotional loans from the

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leverage ratio calculation. Thus, we expect BNG to comfortably meet the regulatory required leverage ratio of 3% in the future.

The Group's LCR of 133% is at an average level but meets comfortably the regulatory required 100%. The banks Net Stable Funding Ratio of 122% is in line with its competitors, however, this ratio is only binding starting 2021.

Due to the bank's business model the bank does not report any customer deposits. Thus, we do not consider appropriate ratios. Overall, BNG's liquidity situation is very satisfactory. Up to now, we do not perceive any liquidity issues at BNG and the whole banking sector and we do not expect a change in this regard at BNG.

A detailed overview of the development of capital and liquidity ratios for the years of 2017 through 2020 can be found in Figure 6 below:

Figure 6: Development of capital and liquidity ratios | Source: eValueRate / CRA

Capital Ratios and Liquidity (%)	2020	%	2019	2018	2017
Total Equity/ Total Assets	3,18	-0,09	3,26	3,63	3,54
Leverage Ratio	3,50	-0,10	3,60	3,80	3,50
Fully Loaded: Common Equity Tier 1 Ratio (CET1)*	33,40	+1,09	32,31	32,10	30,40
Fully Loaded: Tier 1 Ratio (CET1 + AT1)*	39,44	+1,24	38,20	38,10	36,70
Fully Loaded: Total Capital Ratio (CET1 + AT1 + T2)*	39,44	+1,24	38,20	38,10	36,70
SREP Capital Requirements	10,25	-0,08	10,33	8,95	6,25
Net Loans/ Deposits (LTD)	1599,73	+3,86	1595,87	-	-
Interbank Ratio	0,98	-2,43	3,41	3,44	5,05
Liquidity Coverage Ratio	133,00	-25,00	158,00	175,00	207,00
Customer Deposits / Total Funding (excl. Derivates)	4,36	-0,20	4,56	0,00	-
Net Stable Funding Ratio (NSFR)	122,00	-4,00	126,00	133,00	130,00
Change in %- Points			•		•

Fully loaded figures whenever available.

Due to BNG's bank capital and debt structure, as well as its status as a promotional bank of the Netherlands, the Group's preferred senior unsecured debt instruments have not been notched down in comparison to the long-term issuer rating. Due to BNG's lack of non-preferred senior unsecured debt and Tier 2 capital, we do not assign any rating to these capital and debt classes. Due to the relatively low volume of AT1 capital, we do not assign a rating to this capital class as well.

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Environmental, Social and Governance (ESG) Score Card

BNG Bank NV 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, which fosters the sustainable development in the Netherlands.

3,8 / 5

• Corporate Behaviour and Green Financing / Promoting are identified as moderate rating driver. While Green Financing / Promoting is rated positive due to the banks 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.

ESG Sc	ore Guidance
> 4,25	Outstanding
>3,5 - 4,25	Above-average
>2,5 - 3,5	
>1,75 - 2,5	Substandard
<= 1,75	Poor

Factor	Sub-Factor	and the state of t	elevance cale 2021	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	(+)
ronmer	1.2 Exposure to Environ- mental Factors	The sub-factor "Exposure to Environmental Factors" has a low relevance for the credit rating, and is rated negative in terms of the CRA ESG criteria.	2	(-)
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.	1	(+)

cial	12.1 Human Canifal	The sub-factor "Human Capital" has low relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	2	(+)	
Š	12.2 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	(+)	

	I3 1 (ornorate (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	(+)
overnance	3.2 Corporate Behaviour	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	(+)
G	I 3 3 (Ornorato Transnaronov	The sub-factor "Corporate Transparency" has no significant relevance for the credit rating, 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".

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Conclusion

Our rating of BNG Bank N.V. is clearly affected by our opinion that there is a high probability of support by the government of the Netherlands (CRA Rating: AAA/stable as of 18.06.2021) and its public authorities in the event of financial distress. This owes to the fact that the BNG is entirely and exclusively owned by the Dutch State and its local authorities, as well as due to BNG's historical role in public financing. In addition, we assume therefore a public interest of the Dutch authorities in the business operations of the bank. Thus, BNG's credit rating strongly benefits from its relation to the government.

Overall, BNG Bank N.V. (Group) had a solid year of performance in 2020 despite the Corona pandemic challenges. BNG's business is not significantly adverse affected by the pandemic, as the bank is committed to serve the Dutch public sector with its financial needs. The affirmation of the long-term issuer rating follows the stable and widely government-backed business model despite the current economic environment, which is characterized by a high degree of uncertainty.

BNG's net result in the fiscal year 2020 shows a satisfying performance in particular despite the Corona pandemic impact on the economy. Despite the recent worsening, BNG's cost to income ratios are still at an outstanding level, which BNG is able to maintain since years. The bank clearly benefits from its business activities with the Dutch public sector with the highest credit quality. Due to the banks business model we therefore do not expect any material changes in the bank's intrinsic profitability in the upcoming years. In addition, we assume the Corona pandemic impact as limited.

The asset quality of BNG was as in the previous years: outstanding and considerably above average due to the fact that BNG is the major lender to the public sector in the Netherlands. As a result, BNG clearly benefits from its business with Dutch public authorities with an outstanding creditworthiness. In addition, the bank's NPL portfolio is negligible low.

On the liabilities side, BNG maintains its stable development, which is marked by the refinancing activities by issuing long-term bonds. In addition, BNG benefits from lower refinancing costs by the participation in the TLTRO III program of the ECB. The fluctuation of BNG's capital ratios follows the fluctuation of the risk-weighted assets. Nevertheless, BNG's regulatory capital ratios are outstanding as well as a result of its business model as public sector financier with low risk weighted assets. Due to its widely government-backed operations, BNG faces very little refinancing risk.

Outlook

We consider the outlook of BNG's long-term issuer rating and its bank capital and debt instruments as stable. This reflects our view that the bank is able to overcome the

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current adverse impact by the Corona pandemic in particular through its close relation to the Dutch government. However, we will observe how the bank will deal with the long-term Corona pandemic effects, as the final impact is still uncertain. In addition, we assume a stable political environment in the banks market of operation.

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) and a "AA" rating in the "worst case" scenario. The ratings of bank capital and preferred senior unsecured debt would behave similarly based on our rating mechanism. This rating is especially sensitive to changes in total equity and to the bank capital and debt structure in general. In addition, the banks' long-term issuer rating as well as the rating of its preferred senior unsecured debt are in particular sensitive to changes in the rating of the Netherlands. An upgrade of BNG's long-term issuer credit rating and its bank capital and debt instruments is not possible, as BNG already achieved the highest possible credit rating.

By contrast, a downgrade of the Group's long-term issuer credit rating and its bank capital and debt instruments is likely if we see a lowering of the probability of support by the Dutch Government. In addition, a lasting decline of BNG's profitability and / or a further reduction of the banks' capital ratios might lead to a downgrade as well. Moreover, we will observe the ongoing Corona pandemic impact on the business activities of the bank and the Dutch economy in general.

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.

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Appendix

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 7: 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
Bank Capital and Debt Instruments	Rating Date	Result
Senior Unsecured / T2 / AT1 (Initial)	06.04.2018	AAA / A+ / A
Senior Unsecured / T2 / AT1	04.07.2018	AAA / n.r. / n.r.
PSU	17.09.2019	AAA

PSU	29.05.2020	AAA (watch unknown)
PSU PSU	29.05.2020 06.11.2020	AAA (watch unknown) AAA

Creditreform ⊆ 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 as (v3.0), the methodology for the rating of bank capital and unsecured debt instruments (v2.0), 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 27 August 2021, the rating was presented by the analysts to the rating committee and adopted in a resolution.

The rating result was communicated to BNG Bank NV (Group), 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 NV (Group) 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

Creditreform C Rating

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.

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 "Basic

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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 within "Basic data" information card.

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