

## CREDIT OPINION

22 November 2019

Update

✓ Rate this Research

### RATINGS

#### BNG Bank N.V.

Domicile	Netherlands
Long Term CRR	Aaa
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Aaa
Type	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	Aaa
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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## BNG Bank N.V.

### Update to credit analysis

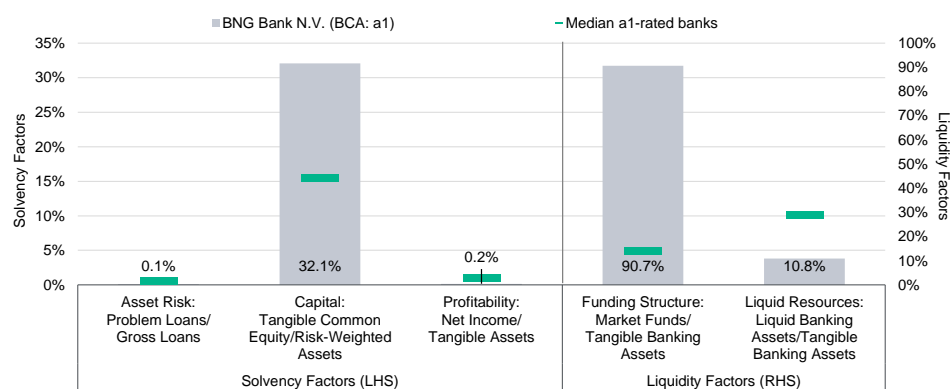
#### Summary

[BNG Bank N.V.](#)'s (BNG Bank) Baseline Credit Assessment (BCA) of a1 reflects the bank's (1) role as the largest lender to the Dutch public sector; (2) entrenched franchise in a niche market which results in exceptional stability in its fundamentals; (3) very high asset quality because its portfolio is mostly comprised of loans to Dutch public entities; 4) high capitalisation; and (5) adequate funding profile and liquidity position with limited maturity mismatches.

BNG Bank's Aaa deposit and senior unsecured ratings reflect (1) the bank's a1 standalone credit strength; (2) the application of our Advanced Loss Given Failure (LGF) analysis, resulting in a two-notch LGF uplift from the bank's Adjusted BCA of a1, given its significant volume of senior unsecured debt; and (3) a two-notch government support uplift, reflecting a very high support probability from the [Government of Netherlands](#) (Aaa stable) owing to the bank's public ownership and its role as one of the main providers of financing to the Dutch public sector. The Counterparty Risk (CR) Assessment of Aaa(cr)/Prime-1(cr) assigned to BNG Bank is four notches above the bank's BCA, reflecting the substantial volume of bail-in-able liabilities and the very high probability of government support.

Exhibit 1

#### Rating Scorecard - Key financial ratios



Source: Moody's Financial Metrics

## Credit strengths

- » Largest lender to the Dutch public sector, fully owned by Dutch public entities
- » High asset quality, reflected in the very low level of nonperforming loans (NPLs)
- » Financial performance commensurate with the bank's public policy role
- » Large volume of senior debt, resulting in the bank's deposit and senior unsecured debt ratings benefiting from a very low loss given failure rate and a two-notch uplift from the BCA
- » Very high probability of government support, resulting in a two-notch uplift for the bank's debt and deposit ratings

## Credit challenges

- » Borrower concentration, given the bank's narrow public policy mandate
- » Mismatches between assets and liabilities, mitigated by an ample liquidity portfolio and diverse funding

## Outlook

We do not expect any significant change in BNG Bank's creditworthiness in the near term, as reflected in the stable outlook on the bank's ratings. Our view is also underpinned by a benign economic environment in the Netherlands.

## Factors that could lead to an upgrade

Upward pressure on BNG Bank's BCA could result from a lower reliance on wholesale funding; however, this is unlikely given the bank's business model. An upgrade of the bank's BCA will not trigger any upgrade of the bank's deposit and senior unsecured ratings, which are already at Aaa.

## Factors that could lead to a downgrade

Downward pressure on BNG Bank's BCA could result from (1) a deterioration in the creditworthiness of the Dutch public sector, (2) a significant increase in the bank's non-0% risk-weighted assets, (3) a significant increase in its funding gaps, or (4) a deterioration in its solvency. A downward movement of the bank's BCA could result in a downgrade of all the ratings. BNG Bank's ratings could also be downgraded if the ratings of the Government of Netherlands were to be downgraded.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### BNG Bank N.V. (Consolidated Financials) [1]

	06-19 <sup>2</sup>	12-18 <sup>2</sup>	12-17 <sup>2</sup>	12-16 <sup>2</sup>	12-15 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (EUR Million)	134,456.0	118,025.0	118,253.0	128,308.0	124,489.0	2.2 <sup>4</sup>
Total Assets (USD Million)	153,118.0	134,919.6	141,997.9	135,333.1	135,231.8	3.6 <sup>4</sup>
Tangible Common Equity (EUR Million)	3,839.0	3,892.0	3,759.0	3,475.0	3,168.0	5.6 <sup>4</sup>
Tangible Common Equity (USD Million)	4,371.8	4,449.1	4,513.8	3,665.3	3,441.4	7.1 <sup>4</sup>
Problem Loans / Gross Loans (%)	0.1	0.1	0.1	0.2	0.1	0.1 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	--	32.1	32.3	28.2	24.8	29.3 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	2.4	1.4	1.5	3.9	4.0	2.6 <sup>5</sup>
Net Interest Margin (%)	0.3	0.3	0.3	0.3	0.3	0.3 <sup>5</sup>
PPI / Average RWA (%)	--	3.7	4.2	3.4	3.1	3.6 <sup>6</sup>
Net Income / Tangible Assets (%)	0.2	0.3	0.3	0.3	0.2	0.2 <sup>5</sup>
Cost / Income Ratio (%)	21.4	21.4	18.8	21.5	22.7	21.2 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	90.3	90.7	91.0	90.4	90.9	90.6 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	15.7	10.8	14.6	17.2	13.9	14.4 <sup>5</sup>
Gross Loans / Due to Customers (%)	1079.3	1466.9	1588.4	1159.4	1301.7	1319.1 <sup>5</sup>

[1]All figures and ratios are adjusted using Moody's standard adjustments. [2]Basel III - fully-loaded or transitional phase-in; IFRS. [3]May include rounding differences due to scale of reported amounts. [4]Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime. [5]Simple average of periods presented for the latest accounting regime. [6]Simple average of Basel III periods presented.

Source: Moody's Investors Service; Company Filings

## Profile

Founded in 1914 and headquartered in the Hague, BNG Bank is a Dutch credit institution specialised in lending to (semi)-publicly owned institutions.

BNG Bank has no branches and does not provide financing to private customers. The bank's clients are mainly local authorities and public-sector institutions in the area of housing, healthcare, education and public utilities.

The bank's shareholders are Dutch public authorities exclusively; 50% of the bank's shares are held by the Dutch State and the remaining 50% are held by municipal authorities, provincial authorities and a district water board.

## Detailed credit considerations

### BNG Bank is the largest lender to the Dutch public sector, fully owned by Dutch public entities

BNG Bank's by-laws restrict its ownership to the Dutch public sector. This ownership structure has been stable since 1925 and is unlikely to change, given the bank's mandate to act as a lender to the Dutch public sector. The bank's long-term loan portfolio was €80.8 billion as of year-end 2018, up slightly from €79.9 billion as of year-end 2017, and total new long-term lending amounted to €11.6 billion in 2018 (€2.1 billion higher than in 2017) and €6.2 billion in the first half of 2019 (a 7% increase year-on-year). The bank's market share of lending to local governments, housing associations and healthcare institutions (core clients) was 71% in terms of long-term lending production in 2018 (stable compared with that in 2017). We expect the bank to maintain its position in the Dutch public-sector financing business, given its mandate, ownership and advantageous funding costs compared with those of commercial banks.

As a bank established with an explicit public policy mandate, BNG Bank benefits from an entrenched franchise in a niche market. These conditions may result in exceptional stability in terms of asset quality, capital and profitability, supporting the bank's ongoing operating performance and resulting in a very low risk profile. This feature is reflected in a qualitative positive adjustment of one notch in our scorecard.

### High asset quality, reflected in the very low level of NPLs

Despite market volatility, BNG Bank has consistently been able to lend to the Dutch public sector at advantageous rates, given the bank's low funding costs compared with those of commercial banks. The bank's narrow public policy mandate translates into concentrations in its loan portfolio. However, these concentrations mainly relate to Dutch local governments and housing associations that benefit from guarantees on their liabilities from the central government (€88.1 billion as of June 2019, including off-balance-

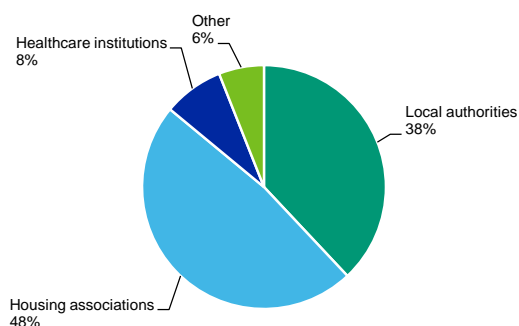
sheet exposures), and, thus, do not entail any capital charge. The bank has also started export refinancing activities under the central government's export credit guarantee.

A small share (€12.1 billion or 12% of total loans and advances, including off-balance-sheet exposures as of year-end 2018) of the bank's lending is subject to a capital charge. These exposures consist of loans, for example, to public-private partnerships. Concentration risks in such loans are modest and volumes are closely monitored. The bank does not intend to materially increase its share of such loans in the foreseeable future.

BNG Bank's securities portfolio (€17.6 billion as of 30 June 2019) mainly consists of highly rated securities. The portfolio is primarily invested in government debt, bonds with government guarantees and covered bonds. As of 30 June 2019, this portfolio was mainly composed of securities rated from Aaa to A (96%) and securities in the Baa range (3%). Non-investment-grade securities only represent 1.3% of the portfolio. BNG Bank's overall exposures to the weaker European sovereigns<sup>1</sup> through both its loan and securities portfolios amounted to €1.4 billion as of the end of June 2019, down from €1.5 billion as of year-end 2018. Exposures were primarily in the form of covered bonds and residential mortgage-backed securities.

Exhibit 3

### Breakdown of long-term loan portfolio as of year-end 2018



Source: Bank report

The bank's non-performing loans totalled €95 million, representing 0.11% of its loans and advances as of 30 June 2019, reflecting its high asset quality.

These factors result in an Asset Risk score of aa1.

### Funding profile and liquidity position are adequate

BNG Bank is almost entirely wholesale funded and, therefore, relies on capital markets for its financing. The bank deploys a diversified funding strategy by issuing debt in multiple currencies and markets, with a view to reaching out to a wide array of investors. BNG Bank's asset and liability management entails some maturity mismatches. The bulk of outstanding funding has remaining maturities between 1-5 years whereas a greater proportion of assets have maturities remaining above five years. Maturity mismatches could have negative implications for the bank's interest margins (whereby the bank's spreads would rise significantly for a prolonged period and imply an increase in the refinancing cost of outstanding loans). However, as of year-end 2018, the refinancing risk over a two- to three-year horizon is limited.

Liquidity risk is managed through euro commercial paper and US dollar commercial paper programmes, and the coverage of gaps by a comfortable liquidity buffer (constituting highly liquid assets - eligible to the liquidity coverage ratio - worth €11.9 billion as of 30 June 2019). The bank also has immediate drawing capacity of €9.6 billion collateralised by public-sector loans (pre-pledged) at the European Central Bank as of year-end 2018. If necessary, the vast majority of BNG Bank's loan book qualifies for central bank funding.

The funding gaps are maintained within reasonable limits and by BNG Bank's good standing in the capital markets. As bonds issued by a promotional bank (an institution where lending to the public sector represents more than 90% of total loans), the securities issued by BNG Bank are classified as "level 1" category assets (the highest quality of the High-Quality Liquid Assets of the "Liquidity Coverage

Ration"). BNG Bank's bonds are also eligible for the European Central Bank's public-sector purchase programme aimed at stimulating the economy. These measures have further enhanced financial institutions' appetite for the bank's securities. As of year-end 2018, BNG Bank's liquidity coverage ratio was 175% and its net stable funding ratio was 133%, in compliance with the European Union (EU) prudential requirements.

These factors are reflected in the bank's Combined Liquidity score of baa2.

### Capital has strengthened thanks to past regulatory uncertainty

BNG Bank's capitalisation is commensurate with its low-risk assets. The bank's Common Equity Tier 1 capital ratio stood at 32% as of 30 June 2019, compared with the regulatory requirement of 10.25% for 2019<sup>2</sup>. As of 31 December 2018, BNG Bank's Tier 1 leverage ratio was 3.8% (2017: 3.5%), above the minimum regulatory requirement of 3%. The bank's Tier 1 capital includes €733 million of Additional Tier 1 capital securities issued in 2015 and 2016.

On 16 April 2019, the European Parliament adopted an amended [Capital Requirement Regulation](#) applying to financial institutions in the EU, which states that public development institutions' exposures to regional governments, local authorities or public-sector entities in relation to public-sector investments are excluded from the denominator of the leverage ratio. BNG Bank's leverage ratio, based on its current capital base, will be substantially in excess of the 3% threshold with these new calculation rules.

### BNG Bank's financial performance is in line with the bank's public policy role

Like other government-related specialised lenders, BNG Bank must generate sufficient profit to grow its capital in line with its portfolio and comply with regulatory capital requirements. However, the bank must also balance out this growth objective with the provision of efficient, low-cost funding to local governments and their related sectors.

While BNG Bank recorded relatively stable net income until 2013, the bank's bottom-line profit was relatively volatile over the past few years, essentially because of changes in market value and one-off changes in valuation methods of financial instruments. While we expect rising expenses, driven by the increasing regulatory requirements, to continue to constrain BNG Bank's profitability, the bank's business model, dominant position in the market and close relationships with its clients (who are also its shareholders) will continue to provide it with sufficient flexibility in setting up margins, thereby preserving the necessary level of profit.

BNG Bank's net interest margin has been consistently around 30-40 bps. BNG Bank's net interest margin was stable at 35 bps in 2018, positively affected by early repayments on long-term loans. However, the prolonged decline in interest rates has weighed on the return on invested capital, further exacerbated by the negative market interest rates on short-term instruments.

Like most other specialised lenders, BNG Bank's costs are low relative to its total assets. The bank's cost-to-income ratio was 21.4% in June 2019, including regulatory costs.

These factors are reflected in the bank's Profitability score of ba1.

### Environmental, social and governance considerations

In terms of environmental considerations, BNG Bank has a low exposure to Environmental risks, in line with our general view for the banking sector. See our [Environmental risk heatmap](#) for further information. Environmental risks to banks are usually indirect, undertaken through financing clients' operations. Such risk exposure is usually unlikely to translate into a meaningful credit impact. However, BNG Bank finances activities which are heavily exposed to Environmental risks and its activities are concentrated in the Netherlands, a country particularly exposed to environmental disasters.

For social risks, we also place BNG Bank in line with our general view for the banking sector, which indicates a moderate exposure to Social risks. See our [Social risk heatmap](#) for further information.

Corporate governance is highly relevant to all banks creditworthiness. Governance risks are largely internally rather than externally driven. We do not have any particular concern about BNG Bank's governance.

## Support and structural considerations

### Loss Given Failure (LGF) analysis

Despite its ownership and public mandate, BNG Bank falls in the scope of the EU Bank Resolution and Recovery Directive, which we consider to be an operational resolution regime. Nonetheless, the Single Resolution Board (SRB) announced on 27 February 2019 that simplified obligations apply to BNG Bank and that the preferred resolution strategy was normal insolvency law - liquidation - rather than bail-in. Based on the current SRB guidelines, the MREL (Minimum Requirement for own funds and Eligible Liabilities) would be restricted to the loss-absorption amount, consisting of the sum of Pillar 1 requirement, Pillar 2 requirement and the combined buffer requirement.

We assume residual tangible common equity of the lower of the current amount and 3%, post-failure losses of 8% of tangible banking assets, a 25% run-off in junior wholesale deposits and a 5% run-off in preferred deposits, and assign a 25% probability to deposits being preferred to senior unsecured debt. The proportion of deposits considered junior is 26%. These are in line with our standard assumptions. The low-trigger Additional Tier 1 securities of the bank are incorporated in the LGF analysis under the heading "Preference shares (bank)".

Our LGF analysis indicates a very low loss given failure for the bank's deposits and senior unsecured debt, leading to a two-notch uplift to the bank's Adjusted BCA.

### Government support considerations

Despite the limitations on government support embedded in the Bank Resolution and Recovery Directive, the scope of which includes BNG Bank, we expect a very high probability of government support for the bank's deposits and senior unsecured debt, resulting in a two-notch uplift for both debt classes. Because of the bank's ownership and public policy mission, its potential for receiving support is considerably greater than that of commercial banks, which are expected to be affected by a bail-in.

The very high support assumptions include the support that would come (1) from the Dutch public sector (including the central government) acting as the shareholder of the bank, and (2) from the government stepping in to address systemic risks. BNG Bank was designated as a domestic systemically important bank in 2015.

### Counterparty Risk (CR) Assessment

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they (1) consider only the risk of default rather than both the likelihood of default and the expected financial loss, and (2) apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR Assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (for example, swaps), letters of credit, guarantees and liquidity facilities.

#### **BNG Bank's CR Assessment is positioned at Aaa(cr)/P-1(cr)**

The CR Assessment, prior to government support, is positioned three notches above the Adjusted BCA of a1, based on the buffer against default provided to the senior obligations represented by the CR Assessment by subordinated instruments. The main difference with our Advanced LGF approach used to determine instrument ratings is that the CR Assessment captures the probability of default on certain senior obligations, rather than expected loss; therefore, we focus purely on subordination and take no account of the volume of the instrument class.

The CR Assessment also benefits from one notch of systemic support. This reflects our view that any support provided by governmental authorities to a bank that benefits senior unsecured debt or deposits is very likely to benefit operating activities and obligations reflected by the CR Assessment as well, consistent with our belief that governments are likely to maintain such operations as a going concern to reduce contagion and preserve a bank's critical functions.

### About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong

divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology and scorecard factors

Exhibit 4

BNG Bank N.V.

<b>Macro Factors</b>							
<b>Weighted Macro Profile</b>		<b>Strong +</b>	<b>100%</b>				
<b>Factor</b>	<b>Historic Ratio</b>	<b>Initial Score</b>	<b>Expected Trend</b>	<b>Assigned Score</b>	<b>Key driver #1</b>	<b>Key driver #2</b>	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	0.1%	aa1	←→	aa1	Quality of assets	Long-run loss performance	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded)	32.1%	aa1	←→	aa1	Risk-weighted capitalisation		
Profitability							
Net Income / Tangible Assets	0.2%	b1	←→	ba1	Earnings quality		
Combined Solvency Score		a1		aa3			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	90.7%	caa3	←→	baa3	Term structure	Market funding quality	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	10.8%	ba1	←→	a3	Additional liquidity resources		
Combined Liquidity Score		b3		baa2			
Financial Profile							
				a2			
<b>Qualitative Adjustments</b>				<b>Adjustment</b>			
Business Diversification				1			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				1			
Sovereign or Affiliate constraint				Aaa			
Scorecard Calculated BCA range				aa3 - a2			
Assigned BCA				a1			
Affiliate Support notching				0			
Adjusted BCA				a1			
<b>Balance Sheet</b>							
		<b>in-scope (EUR Million)</b>	<b>% in-scope</b>	<b>at-failure (EUR Million)</b>	<b>% at-failure</b>		
Other liabilities		23,481	17.5%	24,294	18.1%		
Deposits		7,971	5.9%	7,158	5.3%		
Preferred deposits		5,899	4.4%	5,604	4.2%		
Junior deposits		2,072	1.5%	1,554	1.2%		
Senior unsecured bank debt		98,400	73.2%	98,400	73.2%		
Dated subordinated bank debt		32	0.0%	32	0.0%		
Preference shares (bank)		733	0.5%	733	0.5%		
Equity		3,839	2.9%	3,839	2.9%		
Total Tangible Banking Assets		134,456	100.0%	134,456	100.0%		



Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF Notching Guidance vs. Adjusted BCA	Assigned LGF notching	Additional Notching	Preliminary Rating Assessment
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De Jure	De Facto				
Counterparty Risk Rating	77.8%	77.8%	77.8%	77.8%	3	3	3	3	0	aa1
Counterparty Risk Assessment	77.8%	77.8%	77.8%	77.8%	3	3	3	3	0	aa1 (cr)
Deposits	77.8%	3.4%	77.8%	76.6%	2	3	2	2	0	aa2
Senior unsecured bank debt	77.8%	3.4%	76.6%	3.4%	2	2	2	2	0	aa2

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	3	0	aa1	1	Aaa	Aaa
Counterparty Risk Assessment	3	0	aa1 (cr)	1	Aaa(cr)	
Deposits	2	0	aa2	2		Aaa
Senior unsecured bank debt	2	0	aa2	2	Aaa	Aaa

[1]Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

## Ratings

Exhibit 5

Category	Moody's Rating
<b>BNG BANK N.V.</b>	
Outlook	Stable
Counterparty Risk Rating	Aaa/P-1
Bank Deposits	Aaa/P-1
Baseline Credit Assessment	a1
Adjusted Baseline Credit Assessment	a1
Counterparty Risk Assessment	Aaa(cr)/P-1(cr)
Issuer Rating	Aaa
Senior Unsecured	Aaa
Commercial Paper	P-1

Source: Moody's Investors Service

## Endnotes

- 1 Italy, Portugal and Spain.
- 2 This ratio includes a 4.5% Pillar 1 requirement, a 2.25% Pillar 2 requirement, a 1% phased-in systemic risk buffer and a 2.5% phased-in capital conservation buffer.

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