

CREDIT OPINION

13 May 2022

Update

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RATINGS

BNG Bank N.V.

Domicile	The Hague, 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 following rating affirmation

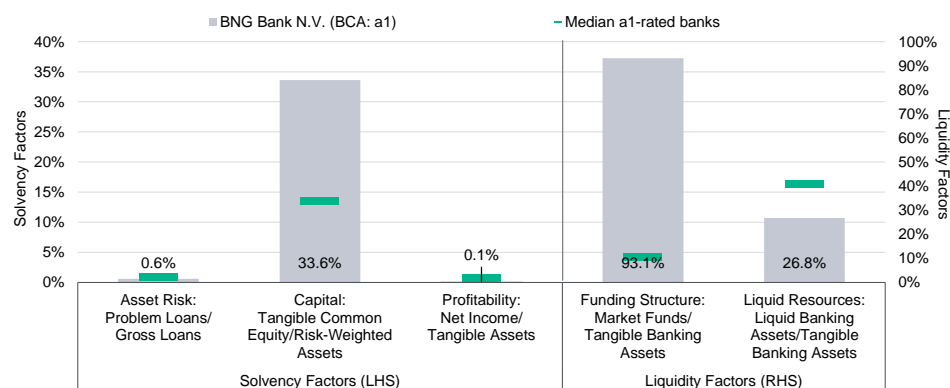
Summary

[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 BCA; (2) the application of our Advanced Loss Given Failure (LGF) analysis, resulting in a two-notch uplift from the bank's Adjusted BCA of a1, given the significant volume of senior unsecured debt; and (3) a two-notch government support uplift, reflecting a very high support probability from the [Government of the Netherlands](#) (Aaa stable) because of the bank's public ownership and its role as one of the main providers of financing to the Dutch public sector.

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 and resilient in the current crisis
- » 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, which results in 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, as reflected in the stable outlook on the bank's ratings.

Factors that could lead to an upgrade

Upward pressure on BNG Bank's BCA could result from a lower reliance on wholesale funding, which is unlikely given the bank's business model. However, 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 downgrade of the BCA could result in a downgrade of all the ratings. BNG Bank's ratings could also be downgraded if the rating of the Dutch government was 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 for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

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

	12-21 ²	12-20 ²	12-19 ²	12-18 ²	12-17 ²	CAGR/Avg. ³
Total Assets (EUR Million)	144,204.0	132,659.0	126,118.0	118,025.0	118,253.0	5.1 ⁴
Total Assets (USD Million)	163,398.4	162,315.7	141,567.2	134,919.6	141,997.9	3.6 ⁴
Tangible Common Equity (EUR Million)	4,117.0	4,078.0	3,875.0	3,892.0	3,759.0	2.3 ⁴
Tangible Common Equity (USD Million)	4,665.0	4,989.7	4,349.7	4,449.1	4,513.8	0.8 ⁴
Problem Loans / Gross Loans (%)	0.6	0.4	0.4	0.1	0.1	0.3 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	--	33.6	31.4	32.1	32.3	32.3 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	12.6	9.3	7.9	1.4	1.5	6.5 ⁵
Net Interest Margin (%)	0.3	0.3	0.3	0.3	0.3	0.3 ⁵
PPI / Average RWA (%)	--	2.7	3.0	3.7	4.2	3.4 ⁶
Net Income / Tangible Assets (%)	0.1	0.2	0.1	0.3	0.3	0.2 ⁵
Cost / Income Ratio (%)	32.2	30.0	24.7	21.4	18.8	25.4 ⁵
Market Funds / Tangible Banking Assets (%)	93.1	91.7	91.6	90.7	91.0	91.6 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	26.8	10.3	9.7	10.8	14.6	14.4 ⁵
Gross Loans / Due to Customers (%)	1988.4	1592.3	1586.9	1466.9	1588.4	1644.6 ⁵

[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 because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and 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 areas of housing, healthcare, education and public utilities.

The bank's shareholders are exclusively Dutch public authorities; 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.

Recent Developments

The Dutch government has implemented in 2020 a support package in response to the Covid crisis, which includes loan guarantees for small and medium-sized enterprises, tax payment deferrals, extraordinary compensation of labour costs for entrepreneurs (under certain circumstances) and one-off payments for the hardest hit industries, thereby supporting corporate borrowers and keeping unemployment low. In 2020, BNG Bank offered a moratorium to clients with loans of less than €2.5 million. This moratorium resulted in only €7 million of payment holidays attributed to 11 customers, compared to the bank's loan book of €86 billion. All deferred payments have since been received, and in 2021 moratorium was no longer offered to clients.

Detailed credit considerations

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

BNG Bank's bylaws 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 €87.4 billion as of the end of December 2021, up €1.7 billion from year-end 2020. Total new long-term lending amounted to €12.8 billion in 2021, which was 9% higher than the 2020 level. This was driven by an elevated demand from the residential sector, in particular in the social housing sector. In the public sector the demand was lower during Covid in 2020 due to ample liquidity support, lower prefinancing needs and limited investment opportunities. Despite the major impact of the crisis on the healthcare sector, the support provided by the state and health insurers limited the negative effect on BNG Bank.

The bank's market share of lending to local governments, housing associations and healthcare institutions (core clients) was 69% in terms of new long-term lending in 2021 (remained unchanged compared with that in 2020). The market shares of outstanding loans

are lower, at approximately 61% for municipalities and 51% for housing associations. 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 - despite a historically high one-off provision made in 2019, supporting the bank's ongoing operating performance and resulting in a very low risk profile. BNG Bank is also relatively insulated from a prolonged economic slowdown if it were to arise following the coronavirus outbreak. 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

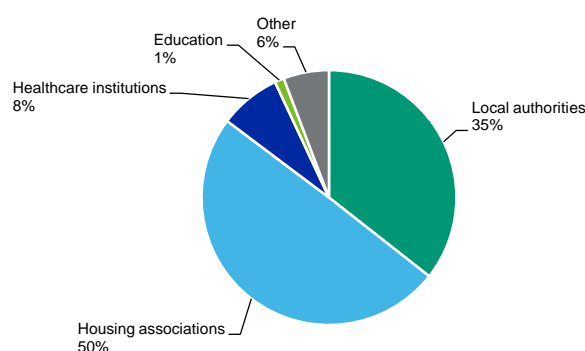
Despite market volatility, BNG Bank has consistently been able to lend to the Dutch public sector at advantageous rates, given the bank's low funding costs compared with those of commercial banks. The bank's narrow public policy mandate translates into concentrations in its loan portfolio. However, these concentrations mainly relate to Dutch local governments, housing associations and healthcare actors that benefit from guarantees on their liabilities from the central government (61.6% of total on-balance sheet exposure, or €80.5 billion as of year-end 2021 compared to €80.3 billion a year ago¹). Therefore, they do not entail any capital charge. The bank also has export refinancing activities under the central government's export credit guarantee.

Less than 10% of the bank's lending was subject to a capital charge at year-end 2021 (9.2% of loans and advances, as of year-end 2020). These exposures consist of loans, for example, to public-private partnerships. Concentration risks in such loans are modest and volumes are closely monitored. Nonetheless, this portfolio was responsible for loan-loss charges of 18 basis points of average gross loans only in 2019 (linked to one weak counterparty who provides services to municipalities). The cost of risk went back down to only 2 bps in 2021. As defined in its recent strategic framework "Our Road to Impact", BNG Bank will now exclusively focus on the public domain in the Netherlands. The bank does not expect any substantial increase in the share of non-zero-risk weighted loans.

The bank's non-performing exposure totaled €549 million as of end-December 2021, representing 0.61% of loans and advances, which reflects the bank's low asset risk.

Exhibit 3

Breakdown of long-term loan portfolio As of year-end 2021



Source: Bank report

BNG Bank's securities portfolio (€18 billion as of 30 June 2021) mainly consists of highly rated securities. The portfolio is primarily invested in government debt, bonds with government guarantees and covered bonds. This portfolio is mainly composed of securities rated from Aaa to A (95.7%) and securities in the Baa range (2.8%). Non-investment-grade securities only represent 1.5% of the portfolio. BNG Bank's overall exposures to the weaker European sovereigns² through both its loan and securities portfolios amounted to around €1 billion as of end-June 2021.

These factors result in an Asset Risk score of aa2.

Strong capital in view of low-risk lending activity

BNG Bank's capitalisation is commensurate with its low-risk assets. The bank's Common Equity Tier 1 capital ratio was 32% as of 31 December 2021, compared with the regulatory requirement of 10.00% for 2022³. The bank's Tier 1 capital includes €309 million of Additional Tier 1 (AT1) capital securities issued in 2016. The bank will redeem the AT1 instruments issued in 2015 (€423.8 million) on 16 May 2022.

As of end-December 2021, BNG Bank's Tier 1 leverage ratio was 10.6% (year-end 2020: 3.5%), above the minimum regulatory requirement of 3%. Pro forma for the redemption of the Additional Tier 1 securities, the bank's Tier 1 leverage ratio would be approximately 9.7% under our calculations.

On 16 April 2019, the European Parliament adopted an amended [Capital Requirement Regulation](#) (CRR II) applying to financial institutions in the EU, which states that public development institutions' exposures arising from assets that constitute claims on central governments, regional governments, local authorities or public sector entities in relation to public sector investments, and promotional loans are excluded from the denominator of the leverage ratio. As a result, the bank's leverage ratio improved substantially in 2021. Based on the previously used methodology, the leverage ratio would have been 3.5% (approximately 3.2% pro forma for the redemption of AT1 under our calculations).

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 loan portfolio and comply with regulatory capital requirements. However, the bank must also balance out this capital growth and profit objectives with the provision of efficient, low-cost funding to local governments and related public sectors.

While we expect increasing expenses, driven by regulation, 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 in the 30-40 bps range. BNG Bank's net interest margin was stable at 34 bps in 2020 yet dropped to 27 bps in 2021. The Net Interest Income decreased by €70 million in 2021, €57 million of which was attributable to a procedural error disqualifying the bank from the 0.5% conditional bonus rate related to the TLTRO for the first period (24 June 2020 to 23 June 2021).

Like most other specialised lenders, BNG Bank's costs are low relative to its total assets. The bank's adjusted cost-to-income ratio increased to 32% in 2021 compared to 30% in 2020. The slight deterioration in cost efficiency was driven by higher bank levy in 2021 and by hiring of temporary external staff in IT and operations.

These factors are reflected in the bank's Profitability score of ba3, which is adjusted upwards by one notch to reflect the quality and stability of earnings.

Funding profile and liquidity 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 the aim of 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 in the range of one to five 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).

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 €8.9 billion as of 31 December 2021). The bank also has an immediate drawing capacity of €16 billion, collateralised by public-sector loans (pre-pledged) at the European Central Bank. Most of BNG Bank's loan book can be used as collateral for central bank funding. Additionally, BNG participated in the TLTRO III launched by the ECB following the coronavirus outbreak, resulting in a significant increase in cash and balances held with central banks. Cash and balances held with central banks increased to €9.3 billion at end-December 2021 from €2.3 billion at year-end 2020. This increased liquidity is temporary and not structural in our opinion.

The funding gaps are maintained within reasonable limits in view of 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 Ratio"). 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 2021, BNG Bank's liquidity coverage ratio (LCR) was 174% (up from 133% in 2020) and its net stable funding ratio (NSFR) was 126% (from 122% in 2020), in compliance with the European Union (EU) prudential requirements.

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

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 heat map](#) 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 significant credit impact. However, BNG Bank finances local authorities and housing associations which are naturally exposed to environmental risks in the Netherlands, a country particularly sensitive to rising sea levels.

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. The rapid and widening spread of the coronavirus outbreak and deteriorating global economic outlook are also creating a severe and extensive shock across many sectors, regions and markets, affecting banks' business and performance. See our [Social risk heat map](#) for further information.

Corporate governance is highly relevant to all banks' creditworthiness. Governance risks are largely internal 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 (BRRD), 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.

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)" in Exhibit 4.

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 BRRD, 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, the probability of receiving government support is considerably greater than that of commercial banks.

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

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

The CR Assessment, before 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.

Methodology and scorecard

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.

Macro Factors							
Weighted Macro Profile		Strong +	100%				
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	0.6%	aa2	↔	aa2	Quality of assets	Long-run loss performance	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded)	33.6%	aa1	↔	aa1	Risk-weighted capitalisation		
Profitability							
Net Income / Tangible Assets	0.1%	b1	↔	ba3	Earnings quality		
Combined Solvency Score		a1		a1			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	93.1%	caa3	↔	baa3	Term structure	Market funding quality	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	26.8%	a3	↔	a3	Additional liquidity resources		
Combined Liquidity Score		b1		baa2			
Financial Profile							
Qualitative Adjustments				Adjustment			
Business Diversification				1			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				1			
Sovereign or Affiliate constraint				Aaa			
BCA Scorecard-indicated Outcome - Range				aa3 - a2			
Assigned BCA				a1			
Affiliate Support notching				0			
Adjusted BCA				a1			
Balance Sheet							
		in-scope (EUR Million)		% in-scope		at-failure (EUR Million)	% at-failure
Other liabilities		36,913		25.6%		37,798	26.2%
Deposits		4,525		3.1%		4,063	2.8%
Preferred deposits		3,349		2.3%		3,181	2.2%
Junior deposits		1,177		0.8%		882	0.6%
Senior unsecured bank debt		97,880		67.9%		97,880	67.9%
Dated subordinated bank debt		36		0.0%		36	0.0%
Preference shares (bank)		733		0.5%		309	0.2%
Equity		4,117		2.9%		4,117	2.9%
Total Tangible Banking Assets		144,204		100.0%		144,204	100.0%

Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF	Assigned	Additional	Preliminary
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De Jure	De Facto				
Counterparty Risk Rating	71.6%	71.6%	71.6%	71.6%	3	3	3	3	0	aa1
Counterparty Risk Assessment	71.6%	71.6%	71.6%	71.6%	3	3	3	3	0	aa1 (cr)
Deposits	71.6%	3.1%	71.6%	71.0%	2	3	2	2	0	aa2
Senior unsecured bank debt	71.6%	3.1%	71.0%	3.1%	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
BNG BANK N.V.	
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 Off-balance sheet commitments amount to €10.9 billion, which remained stable compared to 2020. No breakdown by sector provided.
- 2 Italy, Portugal and Spain.
- 3 This ratio includes a 4.5% Pillar 1 requirement, a 2.00% Pillar 2 requirement, a 1% systemic risk buffer and a 2.5% capital conservation buffer.

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