DGS risk methodology review

September 2024

The Dutch deposit guarantee scheme (DGS) is funded by the banks based on risk-weighted contributions. For the purpose of this risk weighting, banks are classified into four risk categories using various indicators. The risk methodology was completely reviewed in 2021. The new methodology was published on 1 December 2022 and applies from contribution date 31 December 2022.

1

Purpose of the risk methodology

Since 2016, banks have been paying quarterly contributions to the deposit guarantee fund, which has reached its target size of 0.8% of deposits guaranteed under the DGS in 2024. Going forward, the fund will be maintained at its current level, and quarterly contributions will be levied if necessary. Half of the quarterly contribution consists of a basic contribution determined by the size of the guaranteed deposits a bank holds. The other half consists of a risk contribution from all banks which is based on a risk weighting applied to the guaranteed deposits a bank holds. DNB determines the risk weighting of the guaranteed deposits using a risk methodology laid down in laws and regulations.¹ This methodology consists of five risk dimensions that provide a picture of a bank's soundness:²

- i. capitalisation
- ii. liquidity and funding profile
- iii. asset quality
- iv. business model and management
- v. potential losses for the DGS.

For each risk dimension, one or two indicators have been established, each with its own weighting. Based on their score on these indicators, banks are classified into one of four risk categories. These categories weight a bank's guaranteed deposits by a factor of 50% (category 1), 100% (category 2), 150% (category 3) or 200% (category 4).



¹ The methodology is laid down in outline in Sections 29.10 to 29.20 and Annexes B and C of the Decree on Special Prudential Measures, Investor Compensation and Deposit Guarantees under the Wft (Besluit bijzondere prudentiële maatregelen, beleggerscompensatie en depositogarantie Wft – Bbpm) and elaborated further in the Regulation on risk indicators for contributions to the deposit guarantee scheme under the Wft 2024 (Regeling risico-indicatoren bijdragen depositogarantiestelsel Wft 2024).

² The risk dimensions derive from the guidelines issued by the European Banking Authority (EBA) on the methods for calculating contributions to deposit guarantee schemes (EBA/GL/2015/10).

2

Reason for the risk methodology review

Periodic review and recalibration of the risk methodology that categorises banks into risk categories is essential to secure the purpose of risk weighting. To ensure that the risk methodology remains effective and its outcomes plausible, in 2021 we assessed the performance of the risk methodology that had been in place since 2017.

The main conclusion of this assessment was that the risk methodology classification outcomes were routinely too low compared to the classifications assigned by supervision and resolution.³ The assessment covered (i) plausibility of the risk classification resulting from the methodology (by comparing the classifications assigned by supervision⁴ and resolution⁵ for the relevant banks), (ii) effectiveness of the indicator scores⁶ and (iii) model efficiency⁷.

The conclusion of the assessment prompted a recalibration of the risk methodology.

The aim of this recalibration was to ensure that (i) the methodology results in fewer low outcomes across the board, (ii) by improving the differentiating power of some of the indicators and (iii) to increase model efficiency.

The following changes have been made to the model:

 One of the indicators for the 'asset quality' risk dimension is 'risk-weighted assets/total assets', which forms the basis of the risk model. Its weighting has been lowered from 50% to 40% to reduce dependence on this indicator.

- 2. The weight of the 'leverage ratio' indicator for the 'capitalisation' risk dimension has been lowered to 10% from 12.5%. The assessment revealed that this indicator's differentiating power was too low due to its lower limit of 6%. Most banks have a leverage ratio that is higher than 6%, which means they scored 'o' on this indicator. Raising the lower limit to 8% corrects this.
- 3. The overall importance of the 'liquidity' risk dimension has been increased from 12.5% to 20%. This puts more emphasis on the 'liquidity buffer/ total assets' indicator and less on the 'liquidity buffer/guaranteed deposits' indicator. The weight of the 'liquidity buffer/total assets' indicator has been set at 12.5% and its lower limit has been lowered to 40% from 100%. The weight for the 'liquidity buffer/guaranteed deposits' indicator has been set at 7.5%, and its upper limit has been raised to 10% from 0%. These adjustments improve the indicators' differentiating power and in turn the model efficiency.
- The 'business model/management' risk dimension includes the 'return on assets (RoA)' indicator, whose weight has been lowered to 10% from 12.5%. Many banks scored 'o' on this indicator in recent years because their RoA was higher than 0.2%. The lower limit of this indicator has therefore been raised to 0.3%.
- 5. The overall importance of the 'potential losses for the DGS' risk dimension has been increased to 20% from 12.5%. This puts more emphasis on the 'guaranteed deposits/total assets' indicator (15%) and less on the 'asset encumbering' indicator (5%).

³ See the report "Assessment and recalibration of the risk methodology for the Dutch DGS".

⁴ Based on the Supervisory Review and Evaluation Process4 (SREP).

⁵ Based on expected losses when a bank is resolved in line with established resolution strategies.

⁶ The more effective the indicator scores, the better they are able to differentiate between institutions.

⁷ Model efficiency ensures that the model is as simple as possible.

Determining a bank's risk category under the new risk methodology

The new risk methodology has seven indicators for the five risk dimensions. The weight of these indicators adds up to 100%. Each indicator has a lower and an upper limit, which determine the score on an indicator. The scores on all indicators are normalised to a value between o and 1 in order to make them comparable.

Risk dimension	Risk indicator(s)	Weighting	Lower limit*	Upper limit*
Asset quality	Risk-weighted assets / TA	40%	0%	100%
Capitalisation	Leverage ratio	3%		
Liquidity	Liquidity buffer / TA	12.5% 40%		0%
	Liquidity buffer / Guaranteed deposits under Dutch DGS	7.5%	100%	10%
Business model and management	Return on assets	10%	0.3%	0%
Potential losses for DGS	Guaranteed deposits under Dutch DGS / TA	ch DGS / TA 15%		100%
	Encumbered assets / TA	5%	10%	30%

Table 1 Specifications of the new risk methodology

* The risk indicator is normalised within these limits. The lower limit equals o (low risk score), the upper limit equals 1 (high risk score). In between, the indicator score has a sliding scale.

As an example, take the indicator for the degree of asset encumbering (encumbered assets/total assets). The lower limit of this indicator is 10% and the upper limit is 30%. The degree of asset encumbering for a bank with 260 encumbered assets and 1,000 total assets equals 26%. Based on the lower and upper limits, the indicator score for this bank is normalised to 0.8.

Note that normalisation is reversed for some indicators (i.e. a high value on the risk indicator equals a low risk score). This is the case with indicators where a high value equals low risk, such as the leverage ratio. Table 1 shows the specifications of the new risk methodology. Table 3 in Annex I provides a comparison between the old and new risk methodologies.

Banks periodically report the variables underlying the indicators based on FINREP and COREP. The Annex provides an overview of the report fields used by the risk methodology and their location in the FINREP and COREP reports. The calculation of the indicator score is based on the reference date, which is the end of the quarter preceding the quarter for which the contribution is due. Thus, the reference date for the fourth quarter of 2022 is 30 September 2022 (see Table 2).

Table 2 Quarters and reference dates

Quarter for which contribution is due	Reference date
1st quarter	31 December
2nd quarter	31 March
3rd quarter	30 June
4th quarter	30 September

A bank's risk score is then calculated using the weighted average of the indicator scores. Continuing the earlier example, an indicator score of 0.8 on the degree of asset encumbering – an indicator with a weighting of 6.25% – would increase the bank's risk score by 0.05 (0.8 x 6.25%).

To avoid (quarterly) outliers, the classification of a bank into a risk category is based on the average risk score over the past four quarters. In the new risk methodology, the thresholds between risk categories have been lowered to such an extent that banks are more likely to be classified in category 2 (100% weighting) or category 4 (200% weighting). This is consistent with sub-conclusion 1 from the assessment that banks are over-represented in the lowest (1) and the highest category (4). The threshold between category 1 (50%) and 2 (100%) has been reduced to a risk score of 0.25 from 0.30. The threshold between category 3 (150%) and 4 (200%) has been reduced to 0.55 from 0.60. Figure 1 summarises how risk classification works. Table 4 in Annex I shows a comparison between the classification in risk categories under the old and new risk methodologies.

Figure 1 Calculation of risk category using the risk scores



⁴

When will the new risk methodology be applied for the first time and what future changes can be expected?

The new risk methodology was published in the Government Gazette on 1 December 2022.⁸ Effective 1 September 2024, the regulation changed from a ministerial regulation to a DNB regulation as a consequence of the entry into force of the Deposit Guarantee Amendment Decree 2024.⁹ The new risk methodology will be applied for the first time when calculating the contributions to the deposit guarantee fund for the first quarter of 2023, with reference date 31 December 2022.

Do you have any questions about the DGS risk methodology review? Please contact the DGS Info Desk at <u>dgs@dnb.nl</u>.

⁸ Regulation of the Minister of Finance of 23 November 2022, 2022-0000215897, Financial Markets Directorate, amending the Regulation on risk indicators for contributions to the deposit guarantee scheme under the Financial Supervision Act (*Wft*) in connection with adjustments to the method for calculating risk scores and determining risk categories for banks for the purposes of the deposit guarantee scheme.

⁹ The new regulation is known as 'Regulation of De Nederlandsche Bank N.V. of 18 June 2024 containing rules on the use of risk indicators in calculating risk scores of banks for the purposes of the deposit guarantee scheme (Regulation on risk indicators for contributions to the deposit guarantee scheme under the *Wft* 2024)', Government Gazette 2024, no. 24163.

5

Annex 1 Comparison of the old (up to 31-12-2022) and new (from 31-12-2022) risk methodologies

Table 3 Old and new risk methodologies – specifications

		Old risk methodology		New risk methodology*			
Risk dimension	Risk indicator(s)	Weighting	Lower limit	Upper limit	Weighting	Lower limit	Upper limit
Asset quality	Risk-weighted assets / TA	50.0%	0%	100%	40%	0%	100%
Capitalisation	Leverage ratio	12.5%	6%	3%	10%	8%	3%
Liquidity	Liquidity buffer / TA	6.25%	100%	0%	12.5%	40%	0%
	Liquidity buffer / Guaranteed deposits under Dutch DGS	6.25%	100%	0%	7.5%	100%	10%
Business model and management	Return on assets	12.5%	0.2%	0%	10%	0.3%	0%
Potential losses for DGS	Guaranteed deposits under Dutch DGS / TA	6.25%	0%	100%	15%	0%	100%
	Encumbered assets / TA	6.25%	10%	30%	5%	10%	30%

* Model adjustments in bold

Table 4 New classification of risk categories - specifications

		Average risk score**		
Risk category	Risk weighting	Old risk methodology	New risk methodology*	
Category 1	50.0%	0 - 0.3	0 - 0.25	
Category 2	100%	0.3 - 0.45	0.25 - 0.45	
Category 3	150%	0.45 - 0.6	0.45 - 0.55	
Category 4	200%	0.6 - 1	0.55 - 1	

* Model adjustments in bold

** Average risk score calculated over the past four quarters

Annex II Risk methodology source data

The variables used to compile the indicators are taken from the COREP and FINREP reports that banks must periodically submit under Commission Implementing Regulation (EU) No 680/2014. Table 3 provides specific references to the fields used for this purpose. In addition to the variables taken from the COREP and FINREP reports, the risk methodology also uses the 'guaranteed deposits by the Dutch DGS' variable. This is derived from a bank's reported deposit base as stated in the reporting templates referred to in Section 130(1)(b) of the Decree on Prudential Rules for Financial Undertakings (*Besluit prudentiële regels Wft – Bpr*).

Table 5 Overview of reporting fields used

Variable	Annex*	Template number	Template code	Line	Column
Leverage ratio	Х	47	C47.00	330	010
Liquidity buffer	XXIV	76	C67.00	010	010
Total assets	III	1.1	F01.01	380	010
Risk-weighted assets	II	2	C02.00	010	010
Net income**		2	F02.00	670	010
Encumbered assets	XVI	32.1	F32.01	010	010

* Annexes to Commission Implementing Regulation (EU) No 680/2014.

** The banks report their cumulative net income in the relevant financial year on a quarterly basis. To calculate the actual net income in each quarter, the data for the second, third and fourth quarters in a financial year must be adjusted. This involves deducting the reported net income for the previous quarter or quarters within the same financial year from the reported net income for that quarter