



**BANQUE DE FRANCE
RATINGS**

**2022 PERFORMANCE
ASSESSMENT**



June 2023



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FOREWORD

This document provides a series of indicators used by the Banque de France to monitor the performance of its rating system.

The objective of a rating system is to classify companies according to the probability of occurrence of a default event over a given time horizon.

While deciding which rating to provide, financial analysts build their assessment on all relevant available information. The benchmark horizon for the Banque de France's assessment is three years, therefore financial analysts take into account the outlook for the medium-term horizon to capture predictive aspects. Such process provides some stability to the through-the-cycle assessment – at least in the case of the highest ratings. In addition, financial analysts will incorporate any significant new elements as soon as they come to their attention to deliver reactive up-to-date rating.

The measurement of a rating system's performance should meet multiple objectives:

- It must enable an outside observer to form an opinion on the rating system's ability to classify companies appropriately according to their level of credit risk.
- It must provide details on how the rating system achieves a balance between stability and responsiveness.
- The value of the indicators must be interpreted in relation to the rating system's parameters, such as the definition of "default" and the size of the portfolio of companies covered by the system.



1. DETAILS ON THE STATISTICAL METHODOLOGY

The Banque de France rating provides an assessment of a company's ability to meet its financial commitments over a three-year horizon. It is a measure of a company's credit risk, reflecting a judgement as to the degree of risk incurred by its lenders.

Ratings are assigned by analysts located throughout France, in compliance with the professional and ethical standards set out in the "[Banque de France code of conduct for company rating activities](#)".

Each year, companies meeting the qualifying criteria (i.e. with a turnover equal to or higher than €750,000 excluding tax) undergo a risk analysis, based on the following elements:

- an examination of the most recent company financial statements (less than 24 months old);
- qualitative information.

The statistics presented in this document concern companies within this population, which have been assigned one of the following ratings: 3++, 3+, 3, 4+, 4, 5+, 5, 6, 7, 8, 9 or P (previous rating scale : see Box 1).

These statistics are based on the notion of default which includes not only failure (opening of legal proceedings : receivership or judicial liquidation) but also payment incidents on trade bills declared by credit institutions when these incidents exceed a certain threshold. A company is considered to be in default if the cumulative amount of payment incidents on trade bills over 6 months exceed 10% of its purchases including VAT (or €45,000 if the amount of its purchases isn't known) and if the overrun of this threshold is sanctioned by the assignment of a specific rating after assessment of the situation by a Banque de France analyst.

Please note that this definition of default, which is used by the Banque de France in the context of its ECAI status, differs from the one set out in Regulation (EU) No 575/2013 of 26 June 2013.

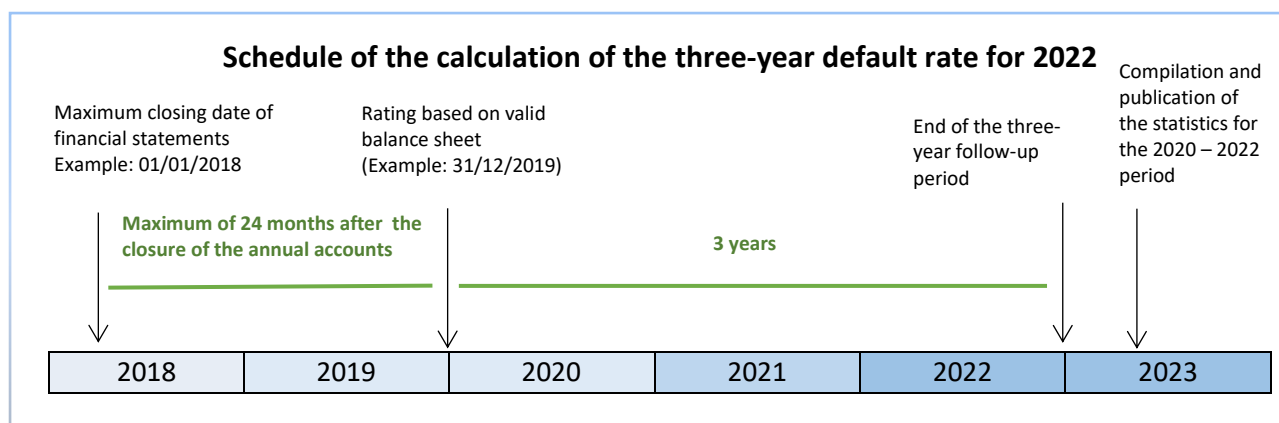
The statistics provided in this document do not cover the rating 0, which is assigned to companies of which financial statements have not been examined for the period under review.

Default and failure rates are "fixed" as they are calculated from the 31st December of the year before the period for which they are calculated.¹

The analysis of the one-year and two-year default rates provides useful additional insight since the three-year default rate incorporates these shorter horizons. The one-year default rate observed over the year 2022 under review is calculated on the non-defaulting companies at 31/12/2021. The two-year default rate observed over years 2021 and 2022 is calculated on the non-defaulting companies at 31/12/2020. Finally, the three-year horizon default rate observed over years 2020, 2021 and 2022 is calculated on the non-defaulting companies at 31/12/2019.

¹ As of the publication of the 2016 statistics, default and failure rates are calculated using the "fixed rate" method and not the "rolling rate" method. All rates for previous years have been recalculated using this method (Section 2.2) to ensure comparability between different years.

This document provides the most recent statistics, i.e. those available in 2023. As errors or changes can occur when payment incidents are declared (e.g. revisions to or cancellations of incidents), statistics on defaults are published a few months after the end of the period under review to ensure that data series are stable (including for the most recent data).



Box 1: Assessing Banque de France rating performance in the context of the introduction of the new rating scale

On 8 January 2022, the Banque de France introduced a new rating scale (NRS). This new, more granular scale aims to provide a more accurate assessment of credit risk: it has 22 notches, compared with 13 notches for the previous scale. The introduction of this new rating scale goes hand in hand with an overhaul of the rating model which, while retaining its fundamental principles (“expert” rating of companies with a turnover equal to or higher than €750,000), provides analysts with a probability of default for each company, based on the company's financial ratios.

As this note aims to measure the performance of the Banque de France rating as part of its status as an External Credit Assessment Institution (ECAI), it focuses on the model's ability to predict defaults over a 3-year horizon. For the 2023 performance assessment, the period under review runs from 1 January 2020 to 31 December 2022, and therefore mainly concerns the credit ratings assigned at 31 December 2019, i.e. ratings from the former rating scale. The statistics for the shorter time horizons (1 year and 2 years respectively) also relate to ratings from the former rating scale (ratings at 31 December 2020 and 31 December 2021 respectively).

Measurement of the performance of the new rating scale within the ECAI framework will begin with the performance assessment published in 2024, and may be carried out for a full three-year period starting with the performance assessment published in 2026:

- In the performance assessment published in 2024, the 1-year statistics for NRS ratings valid at 31 December 2022 will be available.
- The performance assessment published in 2025 will contain 2-year statistics for NRS ratings valid at 31 December 2022 and 1-year statistics for NRS ratings valid at 31 December 2023.
- The performance assessment published in 2026 will contain 3-year statistics for NRS ratings valid as at 31 December 2022, 2-year statistics for NRS ratings valid as at 31 December 2023 and 1-year statistics for NRS ratings valid as at 31 December 2024.



2. STATISTICS BASED ON 2022 DATA

2.1 Predictive capacity of the rating system & compliance with ECAI standards

The Banque de France has an External Credit Assessment Institution (ECAI) status. This status allows credit institutions to use Banque de France’s rating to calculate their regulatory capital requirements for credit risk. The ECAI status implies that the Banque de France complies with default rate thresholds across the entire rating scale over a 3-year horizon (Table 1).

The Banque de France fixed three-year default rates meet the ECAIs’ risk rating limits for all credit ratings.

Moreover, an analysis of the data shows **a consistent progression in default and failure rates across the rating scale and over the three time horizons taken into consideration** (see Appendix 2)

Overall, the default rate for rated companies amounts to 0.91% over a one-year horizon, 1.26 % over a two-year horizon and 1.99 % over a three-year horizon (see Table 1 and Appendix 2).

Table 1: Three-year Banque de France default rates

Credit rating	Number of non-defaulted companies at 31/12/2019	Default within 3 years (2020, 2021, 2022)		Short-run default rate benchmark applied in the ECAI framework ²	
		Number	Rate	Monitoring level	Trigger level
3++	12 371	2	0,02%	0,80%	1,20%
3+	20 755	11	0,05%	1,00%	1,30%
3	33 242	42	0,13%		
4+	43 717	151	0,35%	2,40%	3,00%
4	60 294	578	0,96%	11,00%	12,40%
5+	63 860	1 517	2,38%		
5	21 452	1 351	6,30%	28,60%	35,00%
6	12 550	1 160	9,24%		
7	1 390	300	21,58%	n/a	n/a
8	749	277	36,98%		
9	0				
Total	270 380	5 389	1,99%		

Source: Banque de France, Companies Directorate

² The commission implementing regulation (EU) 2016/1799 stipulate that “recent short run default rates experienced within a rating category should be regularly confronted with their relevant short run benchmarks (‘monitoring’ and ‘trigger’ levels). A breach of the short run benchmarks for a consecutive period of 2 years could signal a weakening of assessment standards which could imply that the new underlying long-run default rate is representative of a less favourable credit quality step. This signal would be more relevant where the trigger level is breached instead of the monitoring level. In particular, a single defaulted item associated with the highest rating categories could trigger consideration of the review of the mapping assigned to the single ECAI that rated that item”.

2.2 Robustness of the system and discriminative capacity of the rating system

An examination of historical ratings data enables evaluation of the robustness of the rating system over time. Moreover, historical data on the one-year and three-year default rates reveal a number of significant trends, notably an almost continuous decline in these rates over the past decade for those ratings classified as eligible for monetary policy operations.

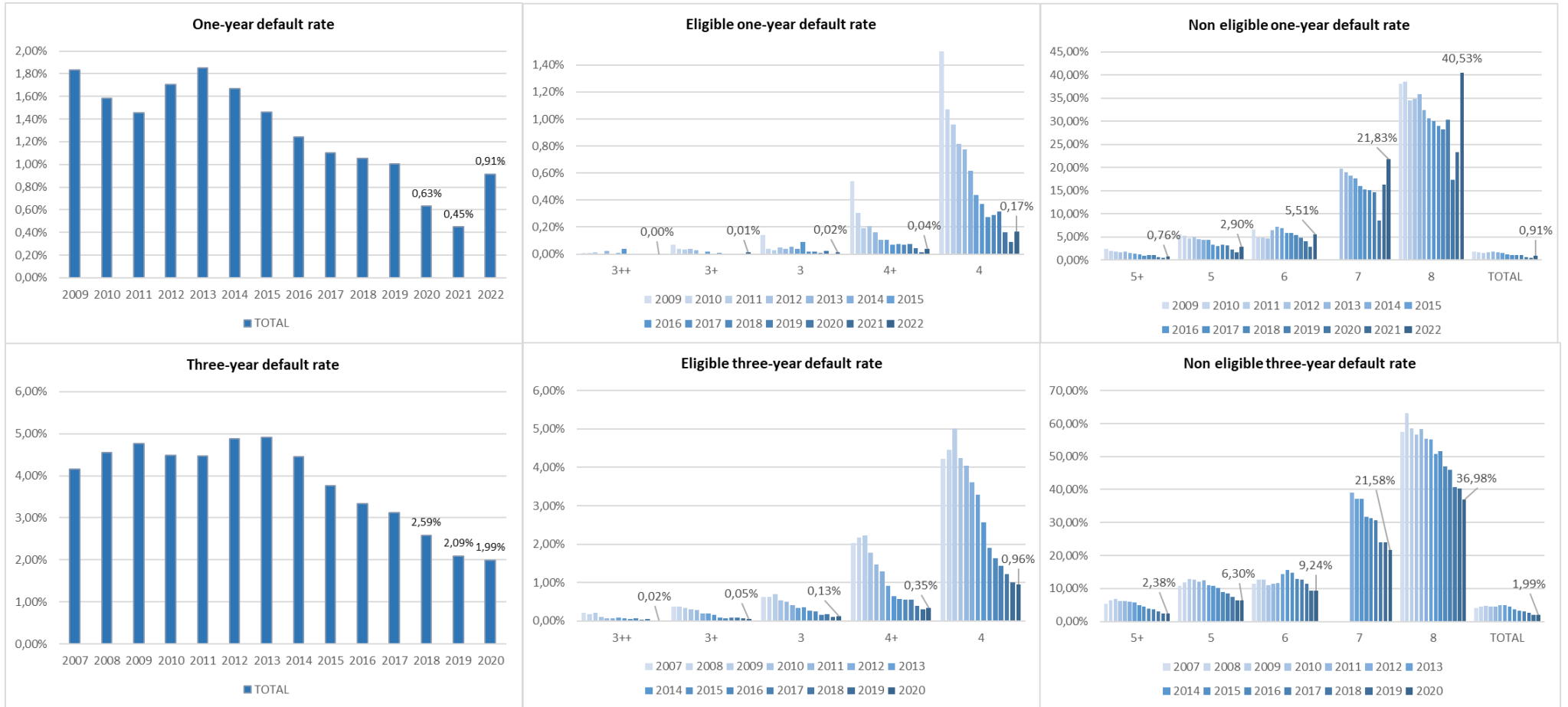
To assess the robustness and consistency of the system over time, the table below shows data based on the closing accounts for 2007 to 2021. On average, and for each of the financial years presented, there is a satisfactory progression in the default rates as we move along the ratings scale.

Looking at the long-term trend in one-year default rates, the following trends emerge (see Graph 1):

- After the financial crisis of 2008-2009, one-year default rates started to fall in 2010, both by rating and as an overall average.
- The temporary rise in the average rate for all ratings in 2012-2013 was due to pressure on the most unfavourable ratings (5+ and above).
- From 2014 onwards, one-year rates fall significantly and fall below the long-term average. They reach their lowest level in 2021, due in particular to the exceptional business support measures adopted during the COVID-19 crisis.
- Default rates rise for all ratings in 2022 compared with their low point in 2021, in a context marked by the interruption of aid linked to the COVID-19 crisis and the rise in the prices of raw materials. However, default rates remain lower in 2022 than the pre-crisis rates in 2019.

Default rates calculated over a 3-year period show the same downward trend as that observed for 1-year rates (graph 1).

Graph 1. One-year and three-year default rates since 2009



More succinctly, the Gini index illustrates the discriminatory power of the model. The Gini index measures the difference between the theoretical distribution of defaults across ratings if the discriminatory power of the model were zero (same default rate across all ratings) and the actual observed distribution of defaults. This measure of model performance ranges from 0 to 1. The higher the index, the greater the model's discriminatory power.

Table 2 shows that a high level of discriminating power has been maintained over time.

Table 2. Changes in the Gini index over time

Gini Index	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
One-year default rate			71%	72%	71%	74%	73%	73%	75%	75%	75%
Two-year default rate		65%	66%	67%	67%	68%	67%	69%	71%	64%	
Three-year default rate	59%	61%	62%	63%	63%	64%	64%	66%	63%		

Source: Banque de France, Companies Directorate

2.3 Stability of companies' ratings

A transition matrix summarises the changes in the credit ratings assigned to a set of companies (in this case, all companies with a valid rating based on their annual accounts at 1 January 2022) between two dates (in this case, between 1 January 2022 and 31 December 2022).

The matrix therefore makes it possible to measure the extent of migration from one rating notch to another over time, both in terms of volume and in terms of the number of notches crossed, and to verify their stability.

- **The ratings taken into account at the beginning of the period (in this case 1 January 2022) are those that are based on the companies' financial statements** (which explains the absence of "0" ratings). This may not always be the case at the end of the period.
- **The "Outcoming" column** corresponds to companies "leaving the sample", i.e. companies that had a credit rating between 3++ and P on 1 January following an examination of their financial statements, which then had a rating "0" on 31 December. A "0" rating means that the Banque de France has not analysed the company's financial statements and has not found any other unfavourable information on the company.
- **The "Of which number of defaults" column** reports the numbers of defaults during the year 2022 according to the rating at the beginning of the year, regardless of the rating at the end of the year or the exit from the scope of the rating system.
- **The "Total" row** shows the breakdown of companies by credit rating at the end of the year.

Table 3: One-year transition matrix for companies rated on January 1st 2022

		At 31/12/2022																				Incoming 1+ to P	Outcoming	Total	Of which number of defaults	
		1+	1	1-	2+	2	2-	3+	3	3-	4+	4	4-	5+	5	5-	6+	6	6-	7	8					P
At 01/01/2022	3++	65,25%	13,42%	12,59%	2,84%	0,89%	0,37%	0,24%	0,12%	0,13%	0,06%	0,31%	0,23%	0,06%	0,04%	0,04%	0,04%	0,27%	0,02%	0,01%	0,00%	0,00%	10 787	341	11 128	0
	3+	11,98%	41,69%	25,39%	9,86%	3,52%	1,51%	0,95%	0,48%	0,24%	0,40%	0,48%	0,24%	0,03%	0,09%	0,02%	0,01%	0,15%	0,01%	0,01%	0,00%	0,01%	16 671	504	17 175	2
	3	3,64%	8,83%	49,03%	16,31%	7,55%	4,01%	2,69%	1,06%	0,68%	0,79%	0,70%	0,43%	0,11%	0,21%	0,04%	0,04%	0,21%	0,02%	0,02%	0,01%	0,01%	31 378	1 179	32 557	5
	4+	1,18%	1,85%	14,41%	20,33%	27,78%	8,15%	8,55%	3,57%	2,53%	3,21%	1,96%	0,96%	0,30%	0,25%	0,10%	0,04%	0,21%	0,01%	0,05%	0,03%	0,03%	44 969	2 121	47 090	17
	4	0,27%	0,45%	3,47%	10,39%	9,56%	8,51%	13,72%	18,83%	6,52%	9,85%	6,80%	3,22%	0,85%	1,17%	0,49%	0,23%	0,47%	0,11%	0,18%	0,10%	0,14%	70 465	3 452	73 917	124
	5+	0,15%	0,19%	0,54%	1,55%	1,88%	1,79%	4,76%	3,29%	3,16%	7,98%	17,82%	23,33%	3,13%	4,29%	3,36%	1,64%	3,17%	0,74%	0,69%	0,31%	0,67%	64 563	11 898	76 461	583
	5	0,08%	0,13%	0,26%	0,55%	0,57%	0,51%	1,95%	1,42%	1,60%	5,16%	15,43%	9,11%	4,71%	9,33%	17,87%	4,59%	8,81%	2,82%	1,22%	0,69%	2,63%	23 993	2 830	26 823	778
	6	0,16%	0,18%	0,24%	0,23%	0,27%	0,20%	0,55%	0,46%	0,46%	1,49%	5,74%	6,32%	2,07%	4,82%	10,87%	6,00%	35,81%	8,10%	1,61%	0,65%	5,22%	13 408	1 251	14 659	808
	7	0,00%	0,09%	0,00%	0,09%	0,09%	0,09%	0,28%	0,19%	0,28%	0,19%	3,10%	1,88%	2,26%	4,23%	3,29%	2,54%	13,17%	14,39%	18,44%	11,67%	16,56%	987	76	1 063	232
	8	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	2,65%	1,24%	0,53%	2,83%	1,59%	1,59%	6,71%	14,31%	10,42%	29,68%	22,97%	535	31	566	199
	9	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	1,64%	0,00%	0,00%	1,64%	14,75%	6,56%	44,26%	27,87%	59	2	61	
	P	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,26%	0,26%	0,00%	0,26%	0,26%	0,26%	0,00%	28,32%	0,77%	0,26%	68,88%	390	2	392	
Total	3,78%	4,3%	10,46%	8,59%	8,26%	4,39%	6,45%	6,30%	3,05%	5,58%	8,27%	8,04%	1,59%	2,53%	3,12%	1,20%	3,57%	0,98%	0,50%	0,31%	0,89%	278 205	23 687	301 892	2 748	

Source: Banque de France, Companies Directorate

Note: Due to the sample outcomings, the total of each row is less than 100%.

The year 2022 was special in that the Banque de France introduced a new rating scale: the old scale of 13 notches (including 0) was replaced on 8 January 2022 by a new scale of 22 notches. On this date, company ratings were automatically converted to 13 of the 22 notches of the new scale: 3++ ratings became 1+ ratings, 3+ ratings became 1 ratings, 3 ratings became 1- ratings, etc. (see Appendix 4).

The one-year transition matrix for 2022 therefore shows little stability in ratings, as analysts took advantage of the greater granularity of the new scale when making rating decisions after 8 January 2022.

In order to control for the introduction a more granular rating scale, it is possible to calculate the stability rate in relation to the Credit Quality Steps (CQS) provided for in Section 2 of Title 2 of Regulation (EU) No. 575/2013³. It can be seen that 59% of companies have kept the same CQS between 1 January and 31 December 2022 and that 97% of companies have not moved more than one step between these two dates.

Table 4: Comparison of CQS changes from 2013 to 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Diagonal	66%	65%	66%	67%	67%	65%	66%	65%	65%	59%
Tri-diagonal	96%	97%	96%	97%	97%	97%	97%	97%	97%	97%
Upgrade rate[1]	24%	24%	21%	20%	19%	20%	21%	29%	21%	22%
Downgrade rate[2]	10%	11%	13%	14%	14%	15%	14%	6%	14%	18%

Source: Banque de France, Companies Directorate

³ Regulation 575/2013 requires all ECAs to specify the correspondence between the relevant credit assessments drawn up by the ECAs and the Credit Quality Steps provided for in the Regulation.

APPENDICES

Appendix 1 Definition and method of calculation of default

Appendix 2 Default rates at 1, 2 and 3 years

Appendix 3 Method used to create rating transition matrices

Appendix 4 Transcoding of credit ratings from the old rating scale to the new rating scale

I. Definition of failure and default

As an ECAI, the Banque de France applies the following default definition. A company is considered to be in default if it meets at least one of the following conditions:

- The company is "in failure": legal proceedings have been initiated against it (receivership or judicial liquidation). In this case, the company is rated P.

Even if the company's rating is subsequently replaced by a more favourable one, for example following the adoption of a continuation plan, the enterprise remains in the default category for the purpose of calculating the statistics.

- The cumulative amount over 6 months of payment incidents on trade bills reported by credit institutions for this company exceeds 10% of its purchases including VAT or €45,000 in the absence of a valid balance sheet, and the breach of this limit is sanctioned by the assignment of a specific rating following an assessment of the situation by a Banque de France analyst.

Under the previous rating scale, if a company exceeded these thresholds, it was assigned a rating 9 after an analyst's review of its situation: this rating 9 is considered a default for the years prior to the introduction of the new rating scale.

Under the new rating scale introduced on 8 January 2022, the rating 9 no longer exists. However, the rating 8, which penalises the breach of lower payment incidents thresholds, still exists. As a result, the definition of default has been adapted to the new rating scale: a company rated 8 is considered to be in default if its payment incidents exceed the threshold of 10% of its purchases including VAT or €45,000.

Under both the previous and the new scales, a company that has received a rating related to its payment incidents (8 or 9) may, if its payments become regular again, move out of this category and receive a more favourable rating following an overall review of its situation by an analyst. However, the file remains in the default category for the purpose of calculating the statistics.

The notion of failure constitutes an objective approach to credit risk⁴. It is available exhaustively and almost instantaneously as soon as it is declared.

The notion of default, which is broader, is based on data from the national database of trade bill payment incidents (CIPE – *fichier Central des Incidents de Paiement sur Effets*), which is managed by the Banque de France under Regulation No. 86-08 of the Banking Regulation Committee of 27 February 1986. The CIPE contains details of all trade bill payment incidents⁵ reported by credit institutions. The materiality of these payment incidents will determine the rating attributed:

⁴ It is objective in the sense that it is based entirely on external information that is not open to interpretation by the analyst.

⁵ Accepted trade bills and electronic trade bills, promissory notes and electronic promissory notes, accepted bills issued for the collection of receivables giving rise to the mobilisation of unguaranteed commercial credit, tax credits, unaccepted trade bills and electronic trade bills, as well as unaccepted bills issued for the recovery of receivables giving rise to the mobilisation of unguaranteed commercial credit.

- Under the previous rating scale : ratings 7⁶ (small-scale payment incidents in the previous six months), 8 (on the basis of the payment incidents reported over the previous six months, the company's solvency appears to be at risk) and 9 (on the basis of the payment incidents reported over the previous six months, the company's solvency is seriously compromised).
- Under the new rating scale: ratings 7 (based on incidents reported over the past 6 months, the company's solvency appears to be very compromised) and 8 (based on incidents reported over the past 6 months, the company's solvency appears to be seriously compromised).

Compared with "failure", using payment incidents to assess a company's financial health provides an earlier and more comprehensive indicator of default. Indeed, the high delinquency rate for companies having experienced major payment incidents and a low probability of return to profitability, justifies treating these payment incidents as defaults.

This definition of default nonetheless differs from the definition set out in Article 178 of Regulation (EU) No. 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms⁷. The Banque de France's definition of default is limited to trade bill payments and does not take into account all of a company's outstanding debts. However, given the importance of trade credit as a means of corporate financing, it is particularly useful to take these payment incidents into account when assessing a company's credit risk.

This notion of default also has a number of advantages in terms of its predictive capacity and stability – both of which are important requirements:

- It is sufficiently predictive, meaning a default on trade bills often precedes a default on bank loans, which in turn generally precedes a bond default and a "legal" default consisting in the opening of legal proceedings: a company's difficulties are generally brought to light during these two latter stages .
- It is sufficiently stable, in that there is no excessively rapid or high rate of return to the "sound" rating categories.

II. Method for quantifying default rates for the different ratings

The ex-post observed default rate⁸ is determined using a "fixed" method over a strictly defined time horizon (1, 2 or 3 years) starting from 1 January of the year in question. The observed default rate is calculated as the ratio between the following:

- the denominator, which takes into account all the companies rated by the Banque de France on the basis of their valid financial statements⁹ as at 1 January of the year under review;

⁶ Up to 31 December 2010, this rating was only used for companies whose financial statements had not been analysed.

⁷ Definition applied by the Eurosystem as a performance measure for the rating systems used by central banks with In-House Credit Assessment System (ICAS) status.

⁸ Rates are calculated for the entire population of companies monitored by the Banque de France, broken down by rating. Thus, each of the ratings attributed by the Banque de France has its own specific failure and default rates.

⁹ Note: ratings are legally valid for a period of 20 months as of the closing date of the financial statements on which they are based. As a result, if the Banque de France receives no further financial statements after these 20 months have expired, the company loses its rating and is no longer taken into account in the default statistics for the subsequent period.

- the numerator, which takes into account all companies which were downgraded to the default category during the period¹⁰ under review (the starting point for the period being 1 January of the year).

¹⁰ 1, 2 or 3 years, as of 1 January.

Appendix 2 Default rates for different time horizons (1, 2 or 3 years)

Credit rating	Number of companies rated as of 31 December 2021	Defaults within 1 year	
		Number	Rate
3++	11 128	0	0,00%
3+	17 175	2	0,01%
3	32 557	5	0,02%
4+	47 090	17	0,04%
4	73 917	124	0,17%
5+	76 461	583	0,76%
5	26 823	778	2,90%
6	14 659	808	5,51%
7	1063	232	21,83%
8	491	199	40,53%
9			
Total	301 364	2 748	0,91%

Credit rating	Number of companies rated as of 31 December 2020	Defaults within 2 years	
		Number	Rate
3++	9 496	1	0,01%
3+	16 183	5	0,03%
3	26 791	10	0,04%
4+	35 981	39	0,11%
4	53 506	217	0,41%
5+	64 951	958	1,47%
5	20 048	867	4,32%
6	10 136	655	6,46%
7	495	162	32,73%
8	190	80	42,11%
9			
Total	237 777	2 994	1,26%

Credit rating	Number of companies rated as of 31 December 2019	Defaults within 3 years	
		Number	Rate
3++	12 371	2	0,02%
3+	20 755	11	0,05%
3	33 242	42	0,13%
4+	43 717	151	0,35%
4	60 294	578	0,96%
5+	63 860	1 517	2,38%
5	21 452	1 351	6,30%
6	12 550	1 160	9,24%
7	1390	300	21,58%
8	749	277	36,98%
9			
Total	270 380	5 389	1,99%

Appendix 3 Method used to create rating transition matrices

The "transition matrix" refers to an "input-output" table summarising the changes in the companies' ratings between an initial observation date and a final observation date (in this case 1 January and 31 December of a calendar year). The start and end dates are the same for all companies.

The objective is to provide a "snapshot" of the evolution of ratings at the given dates: events¹¹ that may have occurred between those two dates are not taken into account. Only the ratings assigned at the start and at the end of the period are taken into account in the transition matrix.

Example

A company rated C5+ at the start of the period (1 January) was downgraded to C8 during the period, then upgraded to D5, which was its rating as on 31 December.

The matrix only takes into account the change from 5+ to 5.

In addition, the Banque de France does not take into account how long the rating has been in force at the start of the observation period. For instance, no distinction is made between a company whose rating at 1 January was assigned six months before and a company whose rating was assigned just two days prior to 1 January.

Companies covered by the matrix:

- The companies taken into account at **the beginning of the period** are rated on the basis of their financial statements. As a result, only those with the following ratings are included: 3++, 3+, 3, 4+, 4, 5+, 5, 6, 7, 8, 9 or P.
- **At the end of the period**, some companies may no longer be rated for various reasons.¹² As a result, under the new rating scale, the following ratings may be included: 1+, 1, 1-, 2+, 2, 2-, 3+, 3, 3-, 4+, 4, 4-, 5+, 5, 5-, 6+, 6, 6-, 7, 8, P and 0.

The share of companies in each rating category that were no longer rated on the basis of their financial statements on 31 December 2022 is shown below (in %):

¹¹ Including a failure (P rating) or payment default (9 rating).

¹² There are various reasons why a company might no longer be rated on the basis of its financial statements after a year:

- the company has not provided the Banque de France with financial statements for the subsequent year;
- the company no longer meets the minimum turnover requirement to be assessed (i.e. EUR 750,000);
- the company no longer exists;
- other (particularly long financial year, etc.).

Rating as of 1 Jan. 2022	3++	3+	3	4+	4	5+	5	6	7	8	9	P	Overall
No recent financial statements as of 31 Dec. 2021	2,27%	2,10%	2,52%	2,62%	2,62%	8,85%	10,38%	13,68%	21,83%	27,21%	37,70%	55,36%	5,56%

The proportion of companies no longer rated on the basis of their financial statements rises as we move down the rating scale: the lower the rating at the start of the year, the greater the likelihood that a company will not provide financial statements for the following year. The 55.36% share for the P rating is thus attributable to the fact that, on January 1, the companies concerned were already dealing with the start of legal proceedings such as a restructuring or liquidation and as a result the majority were unable to submit financial statements over the year.

Sub-total of the matrix

Rows

The matrix rows show the breakdown of companies by credit rating (3++, etc.) at the start of the period.

The "Total" row shows the breakdown of companies by credit rating at the end of the period.

Columns

The matrix columns show the breakdown of companies by credit rating (or "status") at the end of the period.

The "Incoming 1+ to P" column shows the number of companies with a rating given at the start of the period and a significant rating at the end of the period.

The "Outgoing" column shows the number of companies in each rating category that exited the sample, i.e. whose rating based on their financial statements was no longer significant at the end of the period.

The "Total" column shows the number of companies in each rating category at the beginning of the period.

Appendix 4 Transcoding of ratings from the previous rating scale to the new one

On 8 January 2002, the Banque de France introduced a new rating scale with 22 notches, compared with 13 notches for the previous scale. This new, more granular rating scale intends to provide a more accurate assessment of companies' financial health, and to adapt the rating methodology to the requirements of the Banque de France's European statutes. On 8 January 2022, each company's rating was automatically converted to the new scale in accordance with the correspondence table shown below. The Banque de France's analysts then gradually spread the companies across the entire range of this new scale, making rating decisions on the basis of new information (financial statements, qualitative information, etc.) brought to their attention.

New credit ratings		Former credit ratings
1+	Excellent ++	3++
1	Excellent +	3+
1-	Excellent	3
2+	Very satisfactory ++	4+
2	Very satisfactory +	
2-	Very satisfactory	
3+	Strong ++	4
3	Strong +	
3-	Stong	
4+	Good +	5+
4	Good	
4-	Intermediate +	
5+	Intermediate -	5
5	Fragile	
5-	Quite weak	
6+	Very weak	6
6	Faces major uncertainties	
6-	Vulnerable	
7	Highly vulnerable	7
8	Extremely vulnerable	8 et 9
P	Bankruptcy	P
0	No accounting documents analysed and no unfavourable information	0

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