

Mapping of Dagong Europe Credit Rating's credit assessments under the Standardised Approach

1. Executive summary

1. This report describes the mapping exercise carried out by the Joint Committee to determine the 'mapping'¹ of the credit assessments of Dagong Europe Credit Rating (Dagong).
2. The methodology applied to produce the mapping is the one specified in the Commission's Implementing Regulation (EU) 2016/1799 ('the Implementing Regulation') laying down Implementing Technical Standards (ITS) with regard to the mapping of credit assessments of External Credit Assessment Institutions (ECAIs) for credit risk in accordance with Articles 136(1) and (3) of the Regulation (EU) No 575/2013 of the European Parliament and the Council ('the CRR'). This Implementing Regulation employs a combination of the provisions laid down in Article 136(2) CRR.
3. The mapping neither constitutes the one which ESMA shall report on in accordance with Article 21(4b) of Regulation (EC) No 1060/2009 (Credit Rating Agencies Regulation - CRA) with the objective of allowing investors to easily compare all credit ratings that exist with regard to a specific rated entity² nor should be understood as a comparison of the rating methodologies of Dagong with those of other ECAIs. This mapping should however be interpreted as the correspondence of the rating categories of Dagong with a regulatory scale which has been defined for prudential purposes. This implies that an appropriate degree of prudence may have been applied wherever not sufficient evidence has been found with regard to the degree of risk underlying the credit assessments.
4. As described in Recital 12 of the Implementing Regulation, it is necessary to avoid causing undue material disadvantage on those ECAIs which, due to their more recent entrance in the market, present limited quantitative information, with the view to balancing prudential with market concerns. Therefore, the relevance of quantitative factors for deriving the mapping should be relaxed. This allows ECAIs which present limited quantitative information to enter the market and increases competition. Updates to the mapping should be made wherever this

¹ According to Article 136(1), the 'mapping' is the correspondence between the credit assessments of and ECAI and the credit quality steps set out in Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR).

² In this regard please consider http://www.esma.europa.eu/system/files/esma__2015-1473_report_on_the_possibility_of_establishing_one_or_more_mapping....pdf.

becomes necessary to reflect additional quantitative information collected after the entry into force of the revised draft ITS.

- The resulting mapping tables have been specified in Annex III of the Implementing Technical Standards on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013. Figure 1 below shows the result for the main ratings scale of Dagong, the Long-term credit rating scale.

Figure 1: Mapping of Dagong's Long-term credit rating scale

Credit assessment	Credit quality step
AAA	1
AA	1
A	2
BBB	3
BB	4
B	5
CCC	6
CC	6
C	6
D	6

2. Introduction

6. This report describes the mapping exercise carried out by the Joint Committee (JC) to determine the 'mapping' of the credit assessments of Dagong Europe Credit Rating (Dagong).
7. Dagong is a credit rating agency that has been registered with ESMA in 13 June 2013 and therefore meets the conditions to be an eligible credit assessment institution (ECAI)³.
8. The methodology applied to produce the mapping is the one specified in the Commission's Implementing Regulation (EU) 2016/1799 ('the Implementing Regulation') laying down Implementing Technical Standards (ITS) with regard to the mapping of credit assessments of External Credit Assessment Institutions (ECAIs) for credit risk in accordance with Articles 136(1) and (3) of the Regulation (EU) No 575/2013 of the European Parliament and the Council ('the CRR'). This Implementing Regulation employs a combination of the provisions laid down in Article 136(2) CRR. At the time the mapping report was produced, due to its recent date of registration, Dagong did not yet submit its quantitative and qualitative information to ESMA Central Repository (CEREP⁴). Therefore, specific information has been directly requested from the ECAI for the purpose of the mapping, especially regarding the number of ratings produced, the rating methodology and the default definition. This process has included bilateral contacts with the ECAI in order to understand the degree of risk of the observed default rates of its credit assessments and to discuss its policies regarding unsolicited ratings and rating withdrawals.
9. The following sections describe the rationale underlying the mapping exercise carried out by the Joint Committee (JC) to determine the mappings.. Section 3 describes the relevant ratings scales of Dagong for the purpose of the mapping. Section 4 contains the methodology applied to derive the mapping of Dagong's main rating scale, whereas Sections 5 refers to the mapping of its remaining relevant rating scale. The mapping tables are shown in Appendix 4 of this document and have been specified in Annex III of the Implementing Technical Standards on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013.

³ It is important to note that the mapping does not contain any assessment of the registration process of Dagong carried out by ESMA.

⁴ CEREP is the central repository owned by ESMA to which all registered/certified CRAs have to report their credit assessments. <http://cerrep.esma.europa.eu/cerep-web/>.

3. Dagong credit ratings and rating scales

10. Dagong produces a variety of credit ratings. Column 2 of Figure 2 in Appendix 1 shows the relevant credit ratings that may be used by institutions for the calculation of risk weights under the Standardised Approach (SA)⁵:

- **Long term credit rating**, defined as forward looking opinions regarding an entity's ability to meet its financial obligations (bonds, preferred dividends, insurance claims or other debt obligations) and aimed at measuring the likelihood of default of an entity by analysing its credit risk profile. Dagong credit ratings do not include any indication related to the market price, liquidity or any risk other than credit risk.
- **Short term credit rating**, defined as the long term credit rating but assigned to issuers with tenors below 12 months. Under certain circumstances this time limit could be extended due to the characteristics of the debt obligations or regulatory or country-specific factors affecting it.
- **Long term issue rating**, defined as forward looking opinions regarding an entity's ability to meet its financial obligations (bonds, preferred dividends, insurance claims or other debt obligations) and aimed at measuring the likelihood of default of an entity's debt obligation by analysing its credit risk profile. Dagong credit ratings do not include any indication related to the market price, liquidity or any risk other than credit risk.
- **Short term issue rating**, defined as the long term credit rating but assigned to debt obligations with tenors below 12 months. Under certain circumstances this time limit could be extended due to the characteristics of the debt obligation or regulatory or country-specific factors affecting it.

11. Dagong assigns these credit ratings to different rating scales as illustrated in column 3 of Figure 2 in Appendix 1. Therefore, a specific mapping has been prepared for the following rating scales:

- **Long-term credit rating scale.** The specification of this rating scale is described in Figure 3 of Appendix 1.
- **Short-term credit rating scale.** The specification of this rating scale is described in Figure 4 of Appendix 1.

12. At the time the information base to produce the mapping was collected, Dagong did not have any ratings issued yet. However it did provide "indicative ratings" that are assigned to the

⁵ As explained in recital 4 ITS, Article 4(1) CRA allows the use of the credit assessments for the determination of the risk-weighted exposure amounts as specified in Article 113(1) CRR as long as they meet the definition of credit rating in Article 3(1)(a) CRA.

same Long-term credit rating scale as the ratings. Unlike ratings, “indicative ratings” are standalone credit assessments and do not include the external support assessment.

13. In addition, Dagong has provided data on the standalone ratings assigned by the three international ECAs to the items rated by Dagong with “indicative ratings”. Given that the data from benchmark ECAs refers to standalone ratings (without external support assessment), it can be compared to the Dagong’s “indicative ratings”, and therefore used for mapping purposes.
14. The mapping of the Long-term credit rating scale is explained in Section 4 and it has been derived in accordance with the quantitative factors, qualitative factors and benchmarks specified in the ITS.
15. The mapping of the Short-term credit rating scale is explained in Section 5 and it has been indirectly derived from the mapping of the Long-term credit rating scale and the internal relationship established by Dagong between these two scales, as specified in Article 13 of the ITS. This internal relationship is shown in Figure 5 of Appendix 1.

4. Mapping of Dagong Long-term credit rating scale

16. The mapping of the Long-term credit rating scale has consisted of two differentiated stages where the quantitative and qualitative factors as well as the benchmarks specified in Article 136(2) CRR have been taken into account.
17. In the first stage, the quantitative factors referred to in Article 1 of the ITS have been taken into account to differentiate between the levels of risk of each rating category. The *long run default rate* of a rating category has been calculated in accordance with Article 6 of the ITS, as the number of credit ratings cannot be considered to be sufficient.
18. In a second stage, the qualitative factors proposed in Article 7 of the ITS have been considered to challenge the result of the previous stage, especially in those ratings categories where less default data has been available.

4.1.1. Calculation of the long-run default rates

19. Due to the recent registration of Dagong, the information contained in CEREP on ratings and default data cannot be considered sufficient for the calculation of the short and long run default rates specified in the Articles 3 – 5 ITS. As a result, the allocation of the CQS has been made in accordance with Article 6 of the ITS, as shown in Figure 6 and Figure 7 of Appendix 3.
20. The long run default rate benchmark associated with the equivalent category in the international rating scale is a key qualitative factor that has been used for the mapping proposal.

21. For D rating category, no calculation of default rate has been made since it already reflects a 'default' situation.

22. The default definition applied by Dagong, described in Appendix 3, has been used for the calculation of default rates.

4.1.2. Mapping proposal based on the long run default rate

23. As illustrated in the second column of Figure 10 and Figure 11 in Appendix 5, the assignment of the rating categories to credit quality steps has been initially made in accordance with Article 6 ITS. Therefore, the numbers of defaulted and non-defaulted rated items (zero for all rating categories) have been used together with the prior expectation of the equivalent rating category of the international rating scale. The results are specified in Figure 6 and Figure 7 of Appendix 4.

- **AAA/AA/A/BBB/BB/B:** the number of rated items in each of these categories is equal or larger than the respective minimum required number of observed items given the number of defaulted items in the rating category. Thus the credit quality steps associated with the AAA/AA, A, BBB, BB, B rating categories in the international rating scale (CQS 1, CQS 2, CQS 3, CQS 4 and CQS 5 respectively) can be assigned.
- **CCC, CC and C:** since the CQS associated with the equivalent rating category of the international rating scale is 6, the proposed mapping for these rating categories is also CQS 6.

4.2. Final mapping after review of the qualitative factors

24. The qualitative factors specified in Article 7 of the ITS have been used to challenge the mapping proposed by the default rate calculation. Qualitative factors acquire more importance in the rating categories where quantitative evidence is not sufficient to test the default behavior⁶, as it is the case for all rating categories of Dagong's Long-term credit rating scale.

4.2.1. Indicative rating information

25. As described in the previous sections, a sufficient number of credit ratings is not available for Dagong's rating categories. However, Dagong assigns "indicative ratings", which can be used as a different measure of creditworthiness for mapping purposes in accordance with Article 11(2) of the ITS.

26. In order to test the "indicative ratings", Dagong also has provided the standalone ratings of 3 benchmark ECAs for a sample of items also rated by Dagong with "indicative ratings". The sample is based on 136 companies from corporate, financial institutions and insurance sectors.

⁶ The default behavior of a rating category is considered to be properly tested if the quantitative factors for that rating category are calculated under Articles 3 – 5 ITS.

To ensure the comparability of the Dagong indicative ratings and Benchmark standalone ratings, the sample has the following features:

- **Corporate:** The corporate sample includes the leading companies from the largest industrial sectors, their revenues representing from 33%-65% share from their respective industries. The advantages of such a sample are that they have been active debt issuers and present transparent financial reporting, and there is sufficient public data to support the scoring using qualitative factors.
- **Financial institutions:** The sample of financial companies includes a mix of small to very large size banking institutions, with both retail and investment activities being represented. The sample represents approximately 80% of the banking assets in Europe.
- **Insurance:** The sample of insurance companies is smaller, due to the concentration of insurance companies in Europe, and due to limited number of insurance companies with sufficient data availability. However, its low share in the aggregate sample should not influence the results.

27. The relationship between Dagong indicative ratings and standalone ratings by Benchmark ECAs is shown in Figure 8. Based on this relationship, an implied default rate has been calculated for each Dagong rating category as the weighted average of the long run default rate benchmarks associated with the related categories of the benchmark ratings. The result of the calculation of the implied default rates for each rating category is shown in Figure 8:

- **AAA/AA, A, BBB, BB and B:** The implied default rates suggest CQS 1, CQS 2, CQS 3, CQS 4 and CQS 5 for rating categories AAA/AA, A, BBB, BB and B respectively, which is consistent with the Basel mapping. This factor confirms the mapping proposal based on the quantitative factors.
- **CCC-C:** The lack of rated items in these categories does not allow computing an implied default rate.

4.2.2. Other qualitative factors

28. Regarding the **definition of default** applied by Dagong, it is not used for the calculation of the quantitative factors as no rating data is available. Therefore, no specific adjustment has been proposed based on this factor.

29. Regarding **the meaning and relative position of the credit assessments**, they are aligned with the mapping proposal resulting from the quantitative factors. In the case of the D rating category, its meaning is consistent with the one of CQS 6 stated in Annex II ITS.

30. Regarding the **time horizon** reflected by the rating category, Dagong's rating methodology focuses on the long-term. Although this cannot be further supported by transition probabilities due to the low number of ratings, no change is proposed to the mapping.

31. Finally, it should be highlighted the use of the long run default rate benchmark associated with the equivalent category in the international rating scale as the **estimate of the long run default rate** for (1) the calculation of the quantitative factor for all rating categories of Dagong under Article 6 of the ITS and (2) the calculation of implied default rates based on external standalone ratings.

5. Mapping of Dagong's Short-term credit rating scale

32. Dagong also produces short-term credit and issue ratings and assigns them to the Short-term credit rating scale (see Figure 4 in Appendix 1). Given that the default information referred to these rating categories cannot be comparable with the 3-year time horizon that characterizes the benchmarks established in the ITS, the internal relationship established by Dagong between these two rating scales (described in Figure 5 of Appendix 1) has been used to derive the mapping of the Short-term credit rating scale. This should ensure the consistency of the mappings proposed for Dagong.

33. More specifically, as each short-term rating can be associated with a range of long-term ratings, the CQS assigned to the short-term credit rating category has been determined based on the most frequent CQS assigned to the related long-term credit rating categories. In case of draw, the most conservative CQS has been considered. If the most frequent step is identified as CQS 5 or 6, CQS 4 is allocated, as the risk weights assigned to CQS 4 to 6 are all equal to 150% according to Article 131 CRR.

34. The results are shown in Figure 12 and Figure 13 of Appendix 4.

- **A-1.** The issuers rated A-1 enjoy superior short term financial strength, which is adequate to repay all short term debt obligations. It is internally mapped to long-term categories from AAA to A-, which are all mapped to CQS 1 and CQS 2. Therefore, CQS 1 is the proposed mapping.
- **A-2.** The issuers rated A-2 have strong short-term financial strength to repay all short term obligations. However, such capacity could be affected, at a limited level, by the adverse macro environment. It is internally mapped to long-term categories A- to BBB, which in turn range between CQS 2 and CQS 3. Therefore, CQS 3 is the proposed mapping.
- **A-3.** The issuers rated A-3 have sufficient ability to pay their short-term obligations. However, this ability could be impaired by an adverse macro environment. It is internally mapped to long-term categories BBB and BBB-, which in turn are mapped to CQS 3. Therefore, CQS 3 is the proposed mapping.
- **B.** The issuers rated B have an acceptable ability to repay its short-term obligations. However, a substantial level of speculative characteristics is present. This rating category implies an adequate capacity for timely repayment that could be seriously affected by unexpected adversities. It is internally mapped to long-term categories BB+ to B-, which

mappings range between CQS 4 and CQS 5. Since the risk weights assigned to CQS4 to 6 are all equal to 150% according to Article 131 CRR, the mapping proposed for the B rating category is CQS 4.

- **C.** The issuers rated C show a questionable ability to pay their short-term obligations. A default is plausible for these issuers. It is internally mapped to long-term categories CC+ to C, which are all mapped to CQS 6. Since the risk weights assigned to CQS 4 to 6 are all equal to 150% according to Article 131 CRR, the mapping proposed for the C rating category is CQS 4.
- **D.** The issuers rated D is in default, consistent with the meaning and relative position representative of CQS 6. In addition, it is internally mapped to long-term category D, which is mapped to CQS 6. Since the risk weights assigned to CQS 4 to 6 are equal to 150% according to Article 131 CRR, the mapping proposed for the D rating category is CQS 4.

Appendix 1: Credit ratings and rating scales

Figure 2: Dagong's relevant credit ratings and rating scales

SA exposure classes	Name of credit rating	Credit rating scale
Long-term ratings		
Institutions	Long term credit rating	Long term credit rating scale
	Long term issue rating	Long term credit rating scale
Corporates	Long term credit rating	Long term credit rating scale
	Long term issue rating	Long term credit rating scale
Short-term ratings		
Institutions	Short term credit rating	Short term credit rating scale
	Short term issue rating	Short term credit rating scale
Corporates	Short term credit rating	Short term credit rating scale
	Short term issue rating	Short term credit rating scale

Source: Dagong

Figure 3: Long-term credit rating scale

Credit assessment	Meaning of the credit assessment
AAA	Highest Credit Quality: “AAA” ratings denote the lowest expectation of default risk. It indicates that the issuer has exceptionally strong capacity to pay its financial commitments. Although the debt protection factors may change, this capacity is highly unlikely to be adversely affected by any foreseeable event.
AA	Very High Credit Quality: 'AA' ratings denote expectations of very low default risk. It indicates that the issuer has very strong capacity to pay its financial commitments, with no significant vulnerability to any foreseeable event.
A	High Credit Quality: 'A' ratings denote expectations of relatively low default risk. The capacity to pay its financial commitments is considered adequate. However, this capacity may be more vulnerable to adverse business or economic conditions than those of higher rating categories.
BBB	Medium Credit Quality: 'BBB' ratings indicate that expectations of default risk are moderate. In normal conditions, the capacity to pay financial commitments is considered sufficient, whereas under adverse business or economic conditions the risk of default is more likely to exist.
BB	Speculative Credit Quality: 'BB' ratings indicate that the issuer faces major ongoing uncertainties and if exposed to adverse business, financial, or economic conditions, its capacity to meet financial commitments could be potentially affected.
B	Highly Speculative Credit Quality: 'B' ratings indicate that expectations of credit default risk are relatively high but a limited margin of safety remains. Adverse business, financial, or economic conditions will likely impair the issuer's capacity to meet its financial commitments.
CCC	High Credit Risk: 'CCC' ratings indicate very high credit risk. The issuer is vulnerable, and is highly dependent upon favourable business, financial, and economic conditions to meet its financial commitments. Default risk is highly probable.

CC	Very High Credit Risk: 'CC' ratings indicate that the issuer is currently highly vulnerable and faces a very high probability of defaulting on its debt obligations.
C	Highest Credit Risk: 'C' ratings indicate the highest credit default risk. The issuer is in a position of imminent credit default on its debt obligations.
D	Default

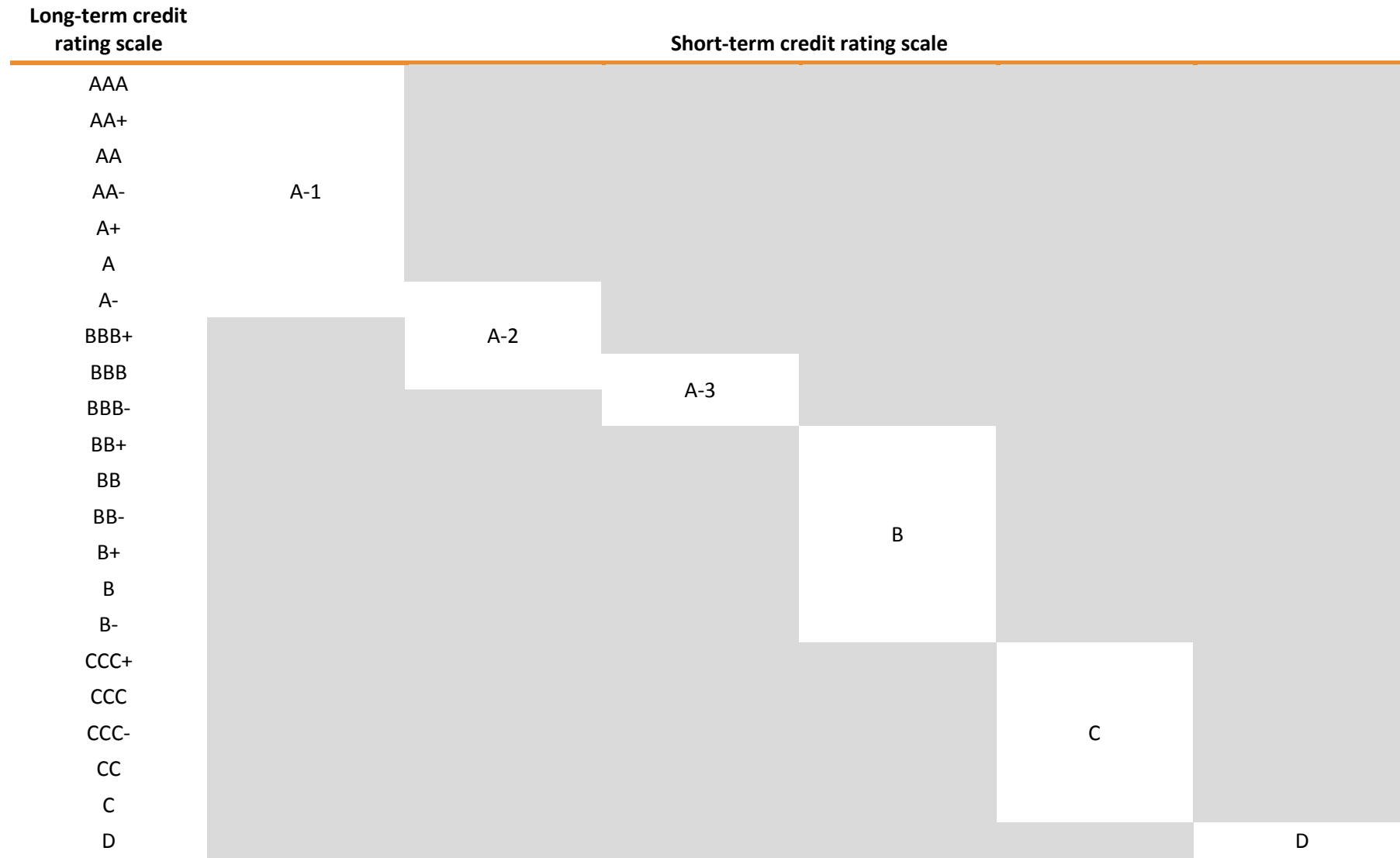
Source: Dagong

Figure 4: Short-term credit rating scale

Credit assessment	Meaning of the credit assessment
A-1	The issuer enjoys superior short-term financial strength, which is adequate to repay all short-term debt obligations.
A-2	The issuer has strong short-term financial strength to repay all short-term obligations. However, such capacity could be affected, at a limited level, by the adverse macro environment.
A-3	The issuer has sufficient ability to pay its short-term obligations. However, this ability could be impaired by an adverse macro environment.
B	The issuer has an acceptable ability to repay its short-term obligations. However, a substantial level of speculative characteristics is present.
C	The ability to pay short-term obligations is questionable and a default is plausible.
D	Default

Source: Dagong

Figure 5: Internal relationship between Dagong long-term and short-term credit rating scales





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Source: Dagong

Appendix 2: Definition of default

Dagong Europe uses the following definition of default:

- Failed or delayed payment of interest and/or principal on any financial obligation except for the missed payment of interest on the due date provided that is remediated within the agreed grace period.
- The issuer files for bankruptcy or legal receivership occurs or other legal impediment to the timely payment of the obligations.
- The creditors are forced to accept a distressed debt exchange with new security or package of securities that leads to a less valuable financial obligation (such as debt/equity swap or debt with a lower coupon or face value, lower seniority or with longer maturity) or the exchange seems aimed at avoiding the default of the issuer.

Source:Dagong

Appendix 3: Default rates of each rating category

Figure 6: Mapping proposal for rating categories with a non-sufficient number of credit ratings

	AAA/AA	A	BBB	BB	B	CCC/ CC/C
CQS of equivalent international rating category	CQS 1	CQS 2	CQS 3	CQS 4	CQS 5	CQS 6
N. observed defaulted items	0	0	0	0	0	0
Minimum N. rated items	0	0	0	0	0	n.a.
Observed N. rated items	0	0	0	0	0	0
Mapping proposal	CQS 1	CQS 2	CQS 3	CQS 4	CQS 5	CQS 6

Source: Joint Committee calculations

Appendix 4: Benchmarking Dagong provisional ratings to Benchmark standalone ratings

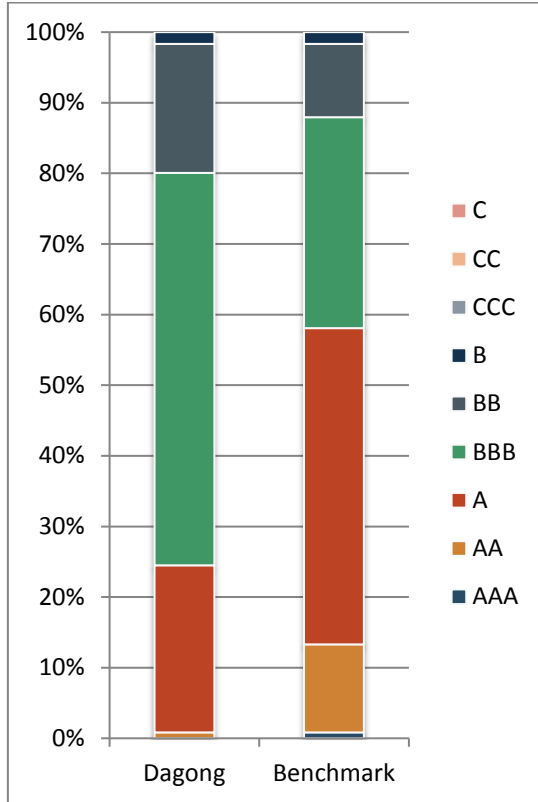
Figure 7: Observed relationship between Dagong and Benchmark ratings

Rating Benchmark	AAA	AA	A	BBB	BB	B	CCC	CC	C	Implied default rate
Rating Dagong	0	0	0	0	0	0	0	0	0	-
AAA	0	0	0	0	0	0	0	0	0	-
AA	0	2	0	0	0	0	0	0	0	0.10
A	0	14	37	6	0	0	0	0	0	0.29
BBB	2	13	53	54	11	1	0	0	0	1.28
BB	0	1	18	12	12	1	0	0	0	2.88
B	0	0	0	0	2	2	0	0	0	13.75
CCC	0	0	0	0	0	0	0	0	0	-
CC	0	0	0	0	0	0	0	0	0	-
C	0	0	0	0	0	0	0	0	0	-
Total	2	30	108	72	25	4	0	0	0	1.53

Note: Rating benchmark is based on the standalone ratings assigned by the three international rating agencies (S&P, Moody's and Fitch)

Source: Joint Committee analysis based on data provided by Dagong

Figure 8: Differences in distribution of Dagong indicative ratings and Benchmark standalone ratings



Source: JC analysis based on data provided by Dagong

Figure 9 shows the distribution of Dagong indicative ratings and standalone ratings of Benchmark ECAIS by rating category for the same sample of rated companies.

As can be observed on the chart, the indicative ratings are less favourable compared to the standalone benchmark ratings. The ratings are mostly in the investment grade, due to the concentration of the sample in the leading companies in the industries included in the sample.

Appendix 5: Mappings of each rating scale

Figure 9: Mapping of Dagong's Long-term credit rating scale

Credit assessment	Initial mapping based on LR DR (CQS)	Review based on SR DR (CQS)	Final review based on qualitative factors (CQS)	Main reason for the mapping
AAA	1	n.a.	1	The quantitative factors are representative of the final CQS. The benchmarking confirms this.
AA	1	n.a.	1	
A	2	n.a.	2	The quantitative factors are representative of the final CQS. The benchmarking confirms this.
BBB	3	n.a.	3	The quantitative factors are representative of the final CQS. The benchmarking confirms this.
BB	4	n.a.	4	The quantitative factors are representative of the final CQS. The benchmarking confirms this.
B	5	n.a.	5	The quantitative factors are representative of the final CQS. The benchmarking confirms this.
CCC	6	n.a.	6	The quantitative factors are representative of the final CQS.
CC	6	n.a.	6	



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C	6	n.a.	6	
D	n.a.	n.a.	6	The meaning and relative position of the rating category is representative of the final CQS.

Figure 10: Mapping of Dagong's Short-term credit rating scale

Credit assessment	Corresponding Long-term credit rating scale (established by Dagong)	Range of CQS of corresponding Long-term credit rating scale	Final review based on qualitative factors (CQS)	Main reason for the mapping
A-1	AAA/A-	1 - 2	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
A-2	A-/BBB	2 - 3	3	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
A-3	BBB/BBB-	3	3	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
B	BB+/B-	4 - 5	4	The final CQS has been determined based on the range of steps associated with the corresponding long-term credit rating category. The risk weights assigned to CQS 4 to 6 are all 150%, therefore CQS 4.
C	CCC+/C	6	4	The final CQS has been determined based on the range of steps associated with the corresponding long-term credit rating category. The risk weights assigned to CQS 4 to 6 are all 150%, therefore CQS 4.
D	D	6	4	The final CQS has been determined based on the range of steps associated with the corresponding long-term credit rating category. The risk weights assigned to CQS 4 to 6 are all 150%, therefore CQS 4.